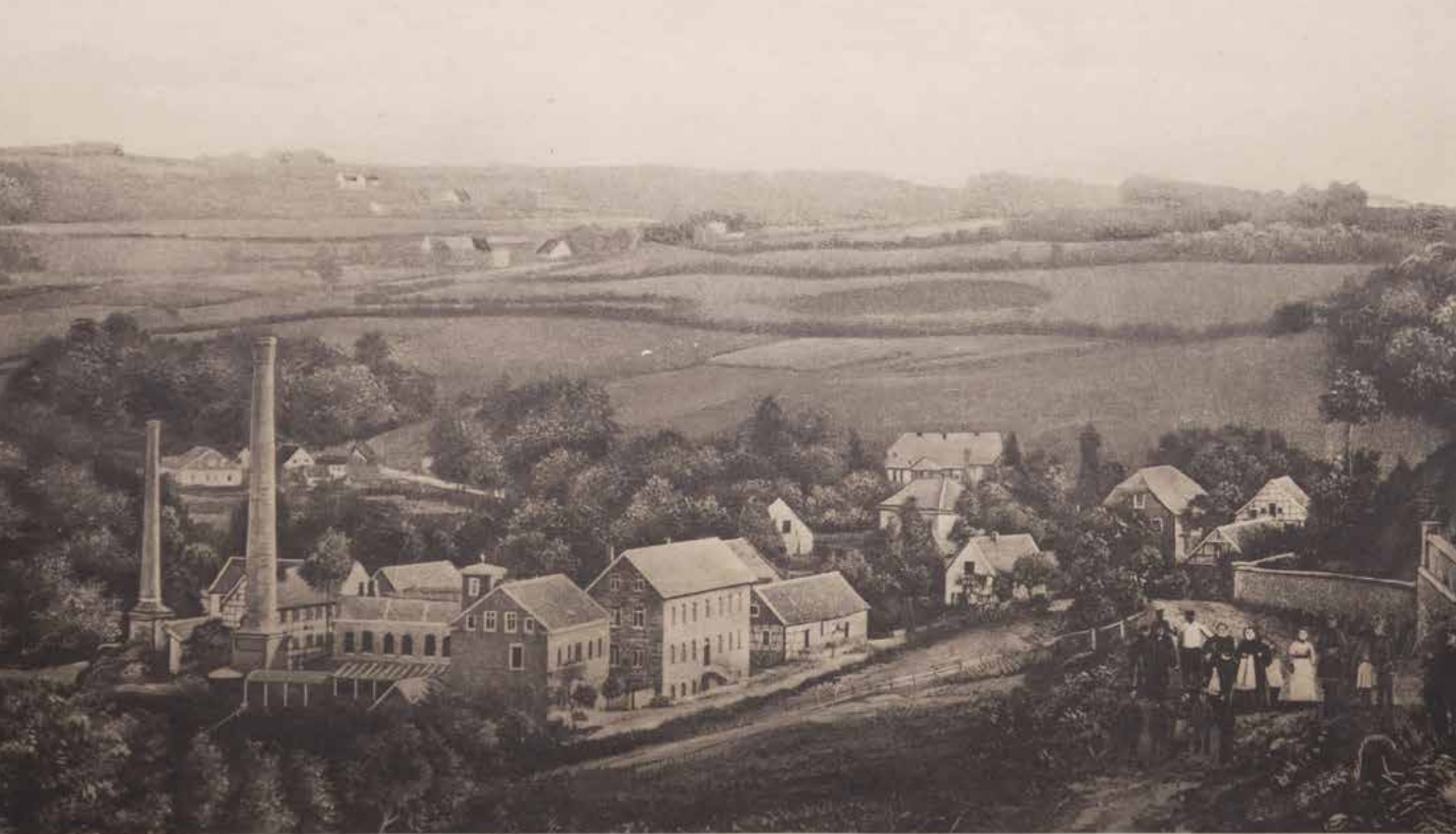




200 YEARS OF ALTENLOH, BRINCK & COMPAGNIE

A Chronicle



View of the ABC screw factory with the building stock erected between 1857 and 1877 with extended area to the Kölner Straße to the front and to the Ennepe to the rear, as well as a second steam engine plant with a 50 meter high chimney. The smaller chimney belongs to the old boiler house.

Preface

On Friday, September 8, 2023, Altenloh, Brinck & Compagnie will celebrate its 200th anniversary. The company looks back on a long history, which it began to celebrate and document in the second century of its existence.

Company anniversaries at Altenloh, Brinck & Compagnie

The first anniversary of the company took place in 1875, but it was not for the manufacturer, but for Carl Lienkämper, who in 50 years of cooperation had become a pillar and confidant for the concerns of the company, the owners and the managers. In 1923, the company wanted to celebrate its 100th anniversary. However, in view of the difficult political and economic times after the First World War, ABC decided not to celebrate, but to pay its employees a bonus. The company's 125th birthday in 1948 fell in the postwar years of World War II. This time, ABC celebrated in style, issuing its first commemorative publication. The following 150th and 175th anniversaries were celebrated in 1973 and 1998, respectively – both times under the direction of Robert Dicke, the great-great-grandson of co-founder Daniel Altenloh. In the mid-1980s, the company began to take a closer look at its history. It was Wilhelm Bachmann (1920-2016), Robert Dicke's longtime employee and confidant, who continued to work for the company after his retirement in 1982, collecting, securing, and organizing historical documents. For the 175th anniversary, he wrote down the company's history for the first time – as a short, three-part narrative with a chronological overview for the company newspaper “*ABC im Profil*”.

Corporate archive and chronicle

The 200th anniversary of the company's founding has now been used as an opportunity to sift through the historical documents with the help of experts, organize them and bring them together in a corporate archive. So that the knowledge of ABC's development does not just remain in the archives, this chronicle brings it to life – for current and former employees as well as shareholders and other groups. This company history is written especially for them and is dedicated to them.

ABC's story – told in pictures and words

This chronicle embeds the history of Altenloh, Brinck & Compagnie in economic and industrial history and makes it easier to understand how, when and why the company developed. The narrative begins with the national and regional conditions of early industrialization around 1823 and then leads step by step through the company's history to the anniversary year 2023. The time periods into which the narrative is divided are the result of turning points in the company's development or contemporary history. The resulting chapters can be read and viewed up to the present day.

Economic history with personal reference

In the process of creating the chronicle, it became clear that this form of presentation makes events tangible, vivid, and comprehensible – whether it is a matter of relationships, successes in machine development, or efforts to find new distribution channels. In fact, this narrative form of corporate history makes it clear how closely people, as employees of companies, are connected to economic history through their lives, their work, and their professional identities – this level of history is often much closer to them than the state and political history that is usually the focus. The historiography presented here is based on historical research, but is designed to be narrative and illustrative – it is intended to be a well-founded narrative, not a reference book or scholarly publication. It strives to be understandable and readable, to be memorable and entertaining. This is achieved not only through the text, but also through the many illustrations, pictures, documents, diagrams and supplementary explanations. They are intended to bring the company's history to life for the family members of this company – with 'aha' effects, moments of astonishment and reflection, and time and again with a smile.



Thanks for commitment to ABC's historiography

Many people have contributed to the creation of this chronicle. The company would like to thank them all. Among them is Sabine Schatting-Siepermann, who has been working for the company since 1993 and was familiar with all the company's activities and developments as executive secretary from 1993 to 2018/2020. Since the beginning of 2021, she has been using her extensive knowledge to compile, sift, and organize the company's historical documents and to research missing information internally. Since the summer of 2021, she has been assisted by historian Irene Rumpler, who has been researching external archives, transcribing and classifying texts, and documenting research results. Together, they are building the company archive, providing the information for this chronicle, and accompanying the process of its creation. They are picking up where the preliminary work left off – the foundation was laid by the honorary city archivist of Ennepetal, August Bartz (1892-1959), and Wilhelm Bachmann with their commitment and work. Past and present employees and shareholders have collected documents, made them available and shared their knowledge of the company's development. In addition, employees of the Ennepetal Municipal Archives and the Building Department provided information and archival material on the history of the city and the company. Numerous other archives opened their collections and supported the research, in particular the the Märkischer Kreis Archive, the German Wire Museum Altena, Ferdinand Bilstein GmbH + Co. KG, the Radevormwald Museum of Local History, the Ennepetal Industrial Museum, Kirchhoff Culture Life, the LWL Open Air Museum Hagen, the Museums Burg Altena, the Osthaus Museum Hagen, the city archives of Ennepetal, Gevelsberg, Hagen, Schwelm, Remscheid and Radevormwald, the department 4 of the city of Ennepetal, the museum (House Martfeld) Schwelm, the Ennepetal City History Collection and the Westphalian Economic Archive.

Basis for third century of corporate development

The company would like to thank the current and former members of the Advisory Board, as well as the shareholders, who have worked and committed themselves to ABC. The greatest thanks go to the past and present employees who fill this company with life, ideas and future through their daily work. It is they who have made Altenloh, Brinck & Compagnie what it is today. May this chronicle be a fitting tribute to them all and the basis for another successful century of Altenloh, Brinck & Compagnie.



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Until 1823:
A time of upheaval

The castle Wetter

About 13 kilometers north of ABC is Wetter Castle on the Ruhr River. It was built in 1250 by the Counts of the Mark, from the 16th century it was no longer used and fell into disrepair.

From the castle ruin to the factory

In 1819, Friedrich Harkort (1793-1880) and Heinrich Kamp (1786-1853) founded one of the first mechanical engineering companies in the region: Mechanical Workshops Harkort & Co. Nothing of this can be seen in today's castle ruins. The painting by the German-American painter Carl Schlickum shows the factory in the right part of the building.



It was a time of upheaval when the screw factory Altenloh, Brinck & Compagnie – ABC for short – was founded in 1823. The five company founders had recognized the signs of the times – with a sharpened eye for the incipient economic and technical changes. They were open to new ideas and focused on change as well as the evolution of familiar processes.

Modernity: The beginning of a new era

In the decades around 1800, the long-established foundations of life in Europe underwent fundamental changes – politically, religiously, economically, socially, and in terms of everyday practice. Whether it was the Enlightenment, the French Revolution, the emancipation of the peasants, the agricultural revolution, de-Christianization, the end of the guilds, or the Industrial Revolution, numerous changes ushered in a new era, the modern age, and with it profound upheavals in the forms of economic activity.

Industry changes employment ties

For a long time, agriculture was the most important sector of the economy. With the onset of industrialization, more and more people worked in trade and industry and less and less in agriculture. Around 1800, 72.5% of Germany's workforce was employed in agriculture, by 1900 it was 38.2%, and today it is only 2%. From 1907 to 1970, industry remained the largest sector of the German economy, replaced by the service sector as the leading field of activity.

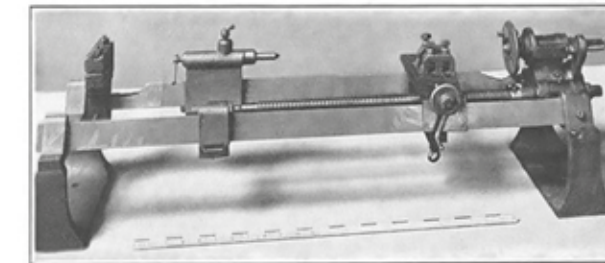
Fundamental upheaval: Industrial revolution

Industrialization and the new 'modern' economy it created brought new opportunities, but also unprecedented risks – to the environment and to health, for example. It changed life and the economy in unprecedented ways and at an accelerating pace. As a result,

industrialization is now seen as a fundamental upheaval and a key epochal threshold – and is therefore often referred to as the 'Industrial Revolution.' It was a qualitative leap that many contemporaries also perceived as a rapid, fundamental and revolutionary process. In the emerging industrialized countries, it led to increased prosperity on the one hand and new forms of poverty on the other.

The machine age begins

It all started in England, in the textile industry. In 1764, the English hand weaver James Hargreaves (1721-1788) invented the first spinning machine, later known as the “*Spinning Jenny*.” But this was only the first step toward the machine age. Many more inventions were needed before the many manual processes in the textile industry could be replaced by machines. The development of the lathe was crucial to the manufacture of screws. The “mother of all lathes” was the screw lathe developed by Henry Maudslay (1771-1831) in 1797.



This threading lathe was designed by Henry Maudslay in 1797 and was of central importance for the emerging mechanical engineering industry, since even a simple lathe with mechanical holding and guiding of the turning steel required three threading spindles.

England as a pioneer and role model

The resounding success of industrialization made England a model and a source of knowledge for all those who hoped to find machine assistance for laborious manual work. People traveled to England to learn about the new technologies. English machines were bought, English specialists were hired, and industrial espionage was carried out as well. Producing “according to the English model” became the central quality feature during this period.



Henry Maudslay (1771-1831) is considered the founder of English machine tool manufacturing. He constructed the first lathe for the precise machine production of threaded spindles and motion screws.

Early industrial centers develop

England had become the pioneer of industrialization in a wide range of industries. Neighboring Belgium and France quickly developed early industrial centers, while technological modernization took somewhat longer in some German regions. But even here there were early industrial centers that were ahead of other German regions. In the metal industry, these were Berlin, Silesia, the Bergische Land and the County of Mark, the region from which the founders of ABC came and where they lived and worked.

Reliable networks for family businesses

In the period of early industrialization, old ties and their securities and constraints, whether landlordism, class hierarchies, faith, church, or guilds, changed. Starting a business under these conditions was risky. It was therefore advantageous to be able to fall back on established relationships of family, work and everyday life. Instead of a commercial education, which only developed in the course of the 19th century, one brought in the experience and reserves of one's own family and/or the family through marriage. Family relationships served as a backstop to take advantage of the emancipatory effect of the market to build one's own business. In this respect, almost all early industrial start-ups were family businesses.

Family as the heart of bourgeois culture

In the emerging middle classes, the still less private, open household communities of farmers and craftsmen with their servants or apprentices and journeymen developed into a new individualistic family mentality with its own rules. The eldest sons were usually expected to take over a business as a matter of course. Daughters were brought up to marry in order to extend and strengthen kinship networks according to economic and family strategy. Wives had their productive role within the family and charity as a counter-world to the economy. The family thus became the center of bourgeois and economic-bourgeois culture. This was expressed in the concept of family tribes, within which businesses were often carried on for generations.



Silhouette of a middle-class family around 1800, here the family of Johannes Caspar Rumpe (1748-1833), an early industrial entrepreneur from Altena

Long-standing commercial development of the region

In the region around present-day Ennepetal, raw materials, especially iron ore, have been the basis for a continuously developing mining industry since the Middle Ages. Through established trade relations, the local hammer mills and forges received high-quality pig iron and crude steel from the Siegerland region 80 kilometers away – for example, the easily forgeable Osemund steel for the production of wire and wire products. The area was rich in the two main sources of energy: wood from the forests and water power from the numerous streams and rivers.

Coexistence of agriculture and commerce

In the region, agriculture alone has rarely been enough to sustain a livelihood. Cattle grazing predominated because of the many hillsides, and there was little arable farming. For this reason, a lively commercial life was established here at an early stage. There were weaving and bleaching mills as well as hammer and grinding mills. Trade was carried out to bring in all the products that were not available locally.

Grown commercial structure and regional centers

The local economy was dominated by peasant households that processed iron and steel as a sideline. There was already close cooperation between mining, agriculture, forestry and crafts – with experience, know-how, contacts and networks. The products were sold through an established commission system. Thus, a flourishing trade structure existed for a long time. Within the region there were small centers that produced a wide range of small iron goods and traded nationally: Iserlohn, Lüdenscheid, Altena, Hagen and the so-called Enneper Street – i.e., the towns of Ennepetal, Gevelsberg, Hagen-Haspe and Hagen-Wehringhausen. The products were mainly household items, tools for agriculture and mining, and all kinds of wire goods.

Between conservatism and awakening

As a result, the region had developed structures that produced a well-developed, specialized metal industry. However, there was also a tendency in some places to stick to traditional methods and refuse the introduction of new techniques. For this reason, it was not only with the boom years of the neighboring Ruhr area in the mid-19th century that the region lost its pre-eminent position in the iron and steel processing industry. Technologically more advanced competitors from England, France, and Belgium had long since influenced sales in iron and steel as well as in mechanical engineering. Some entrepreneurs, however, recognized the pioneering role of foreign manufacturers in good time, practiced industrial espionage and began to break new technological ground.



The Mechanical Workshops Harkort & Co. in Wetter Castle on the Ruhr River around 1834

Early industrialization in the region

By 1800, the neighboring Bergische Land region was already on the cusp of the Industrial Revolution and was considered the “*England in miniature*” – with its skilled craftsmen, entrepreneurial talent, favorable transport links and material resources. Prussian factory commissioner Friedrich August Alexander Eversmann (1759-1837) described it this way, “*Everywhere thou hark there is the sound of hammers and forges. A true lively area.*”

1784/88: First factories emerge

In the Rhineland-Westphalia region, the first factories sprang up soon after the English. In 1784, a mechanical cotton spinning mill based on the English model opened in Ratingen, 40 kilometers away, and four years later, Johann Caspar Rumpe (1748-1833) established the first metalworking production, a sewing needle and thimble factory, in Altena, 30 kilometers away. In times of population growth and limited income opportunities, Friedrich August Alexander Eversmann singled out Rumpe, an early industrial entrepreneur, as a commendable example:

“He grants bread and food to several hundred people. [...] His fatherland rightly esteems him and his king loves him.”

From artisanal wire drawing to machine wire rolling

In fact, Rumpe’s sewing needle and thimble factory had already completed the transition from artisanal to industrial production by 1788. Artisanal wire drawing was replaced by the extensive use of wire-rolling machines developed in England. He made use of machinery and had expanded the business to an extent only known in textile manufacturing.

First local artisanal screw factories

In addition, other companies in the region were producing screws in larger quantities before ABC. In 1804, the factory commissioner Eversmann mentioned two screw factories in the region, but their size were unknown. One of these two factories was the company of Ambrosius Brand in Rahlenbecke, today’s Schwelm, which probably still worked artisanal.

Johannes Caspar Rumpe with a roll of wire
Johannes Caspar Rumpe (1748-1833) was metal trade manufacturer and iron conditioner. In 1788, he established a thimble and sewing needle factory in Altena. It was based on English models and is considered one of the “original factories” of metal production.



Drop hammers in a thimble and sewing needle factory

Re-starting after 1815

The Napoleonic Wars (1792-1815) had hindered the development of industrialization and trade, but the process of integrating the Rhine-Westphalian region into the Prussian state resumed with the reorganization brought about by the Congress of Vienna in 1815. The following decades were dominated by the debate over the nature of the state and society. Prussian officials focused on promoting social and economic development through wise administration. They instituted reforms and promoted free trade. At the same time, a more confident bourgeoisie introduced its liberal ideas and set out to develop its economic potential.

Screws: From artisanal to industrial production

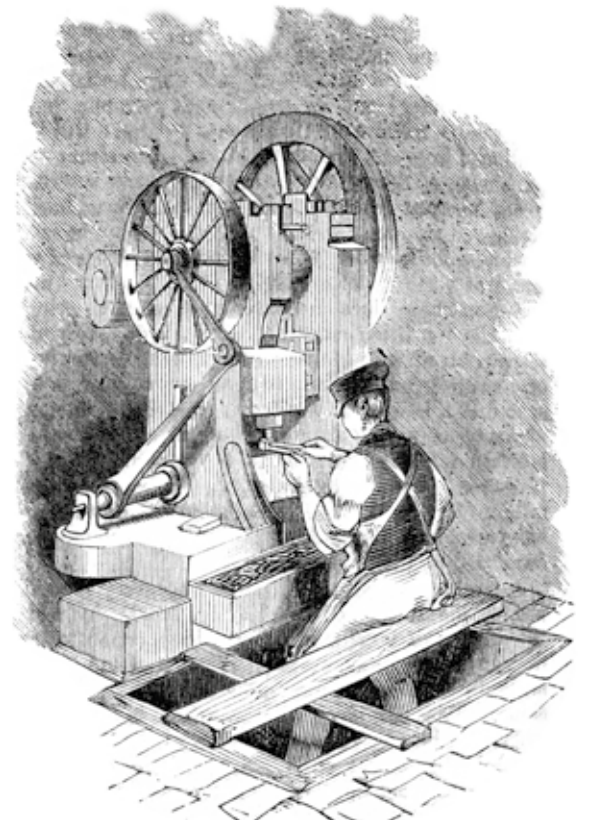
Even in the 19th century, screws were handmade products. They were made using dies, screw plates and scissor clamps – all hand-operated tools. Until then, this was not a problem because customer demand was manageable and the quantities to be produced were limited. The wire for screw production in Hagen and on the Ennepe came mainly from the nearby regions of Iserlohn, Altena and Lüdenscheid. The customers also came from the region – all in all it was a regional business with regional production conditions.

Missing standards

From manufacturing shop to manufacturing shop, thread sizes and pitches varied due to the unique nature of the manufacturing process. Each manufacturer had screw products that were rarely reproducible by others. If a screw broke or wore out, only the manufacturing shop could provide a replacement based on its sample threads. This was due to the fact that there were no binding standards as to what criteria had to be met in the production of certain bolts and nuts.

Growing demand

At that time, most screw production was still done locally. People bought directly from a workshop or from regional merchants. With industrialization and industrial engineering, the demand for screws and removable fasteners grew. Screws were needed for the new textile and steam engines, for plant and railway construction, and for optical and medical equipment.



Workplace for screw production around 1800

Demand for reliable quality

For some entrepreneurs, the need for screws could quickly become a problem. While building a steam engine, for example, Franz Dinnendahl (1775-1826) from the nearby Ruhr area complained,

“he could not find anyone there or in the vicinity capable of making a good screw.”

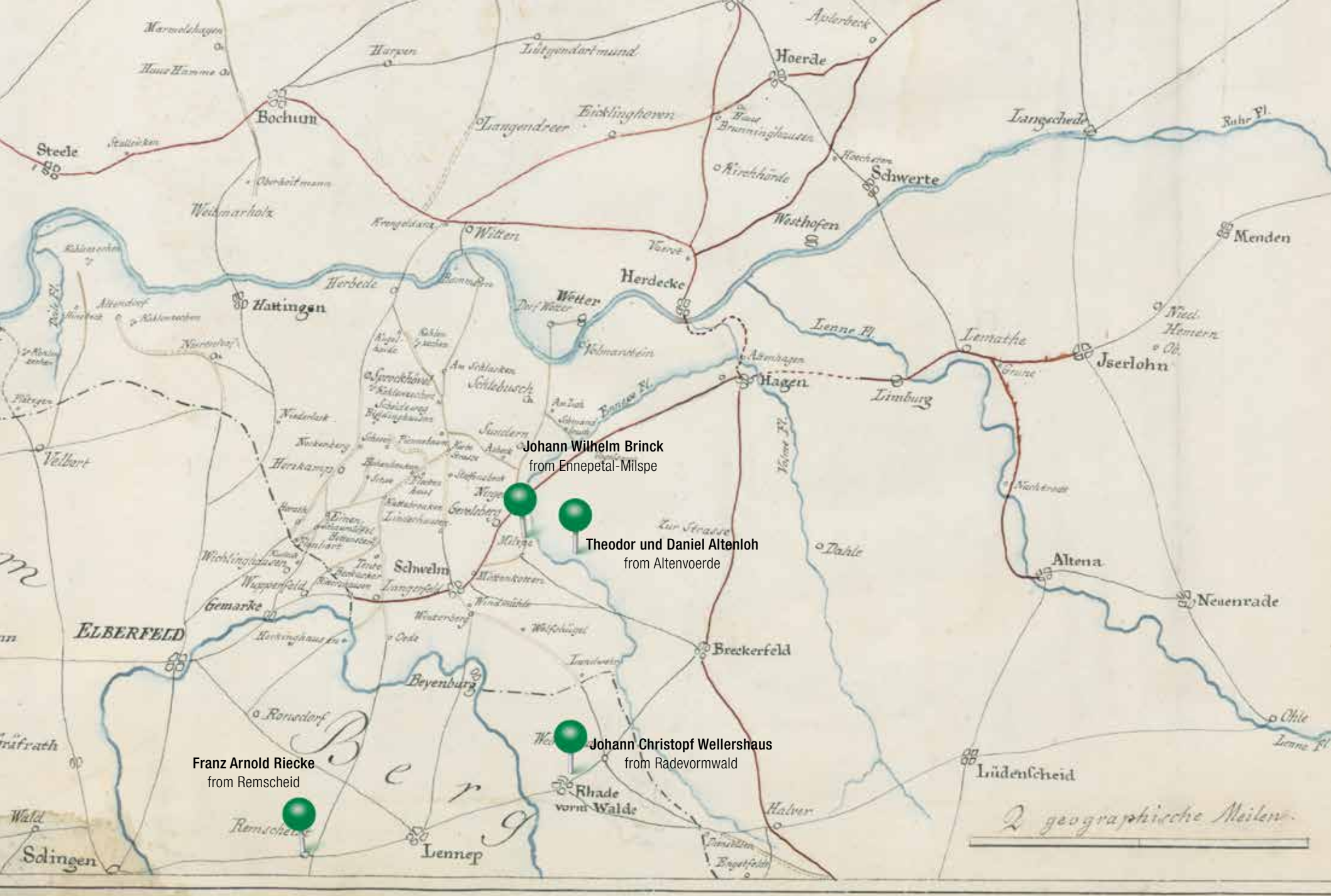
Machine-based screw manufacturing: The time is ripe

Putting all these factors together, it seemed that the time had come for industrial production of quality screws. There was the English model and expertise, as well as a growing transfer of knowledge. Extensive technical and craftsmanship expertise, flourishing trade and commercial structures, and viable networks were also available. The first industrial entrepreneurs were already enjoying visible local success. The demand for good screws and larger quantities was growing.

Accepting the challenge

Those who made screws used a variety of production methods. These ranged from manual labor to hand-operated machines to hydro-powered machines. What was missing, however, was a universal screw-making machine that could produce screws more consistently and in larger quantities. Why shouldn’t what many early entrepreneurs had done in England, Belgium, France be possible for screws?

1823: The founders and their project



The wood screw factory Altenloh, Brinck & Compagnie was founded by five early industrial entrepreneurs. Unlike a large part of the population at that time, they were no longer simple farmers, craftsmen or merchants.

The five founders: Innovative entrepreneurial talents

Like some of their contemporaries, they were innovative entrepreneurs who wanted to use their practical experience in trade and commerce to put their own ideas into practice. They recognized the opportunities offered by the small iron industry in the Mark county and together covered a wide range of competencies. The five founders complemented each other by bringing very different specific skills and resources to the table. Through their families, they had the financial resources and connections to afford such investments of time, money and land.

The basis: Long-established connections

All five of them originated from the immediate surrounding area. So these were not strangers coming together. On the contrary, they drew on long-established ties – from family relationships to trade and craft connections. There was a vision, different roles and responsibilities, and mutual trust.

So who were these five early industrial entrepreneurs, what did they bring to the table, and what connected them?



Theodor Altenloh
* December 12, 1780
† October 28, 1840

Johann Caspar Theodor – known as Theodor – was already active in business before the company was founded in 1823 and was also a municipal councilor in Voerde, now Ennepetal. He gave up these activities in favor of his commitment to Altenloh, Brinck & Co. in order to be able to look after the company more intensively.

He was 13 years older than his brother Daniel. Both came from the Altenloh estate in Altenvoerde and were great-grandchildren of Anna Catharina Bilstein, an ancestor of the Bilstein family of entrepreneurs. In 1810, he had married Sophia Caroline Wirminghaus (1786-1869), with whom he had two sons, Carl Theodor (1811-1856) and Wilhelm (1815-1891), and a daughter named Caroline (1812-1868). At the time of the company's founding, he and his wife were 43 and 37 years old, respectively, and their children were 12, 11, and 8 years old. He co-managed the business for 17 years and died in 1840 at the age of 60.



Daniel Altenloh
* February 16, 1793
† April 4, 1851

Johann Daniel – known as Daniel – was Theodor's younger brother. When the company was founded, he was 30 years old and still single. Six months later he married Maria Louise Wirminghaus (1793-1871), also 30 years old, the younger sister of his sister-in-law. The two Altenloh brothers were thus married to two Wirminghaus sisters, a close family connection. In 1823, the year the company was founded, Daniel Altenloh bought a house with outbuildings, which he and his family occupied next to the site of the nascent company. He and his wife had four daughters – Luise (1824-1893), the twins Ida (1827-1892) and Emma (1827-1894), Elise (1829-1898) – and two sons, Daniel (1830-1882) and Hugo (1837-1906).

He worked for the company for 28 years until his death at the age of 57. He did not live to see a successor, as his elder daughter, Emma, married Heinrich Dicke (1826-1883) after his death and had four children with him between 1856 and 1860. This connection between Emma and Heinrich Dicke is the reason for the name change in the company's management, which still exists today.

Places of origin of the five founders of Altenloh, Brinck & Compagnie



Johann Christoph Wellershaus
* September 30, 1766
† September 17, 1826

Johann Christoph came from Radevormwald, about 14 kilometers from the company's headquarters. That was about three hours on foot downhill, and correspondingly longer uphill, or about two to three hours on horseback. It took much longer by horse-drawn carriage because there was no good road connection.

Wellershaus was a farmer and blacksmith who also worked as a clockmaker. He continued the family tradition, coming from a local watchmaking family and being related to the well-known watchmaker Johann Wilhelm Wellershaus. He brought his knowledge of craftsmanship and precision mechanics, as well as his skills, to the company. By selling his goods, he also had gained experience with the commercial structures and merchants in the countryside at that time.

The signed grandfather clock from the year 1761 of Johann Wilhelm Wellershaus, an ancestor of the ABC founder Johann Christoph Wellershaus, is today in the museum of local history in Radevormwald

In 1804 he married Anna Catharina Kregeloh (*1789). They had four children – the first died the day after birth, two sons, Karl Wilhelm Theodor (1806-1879) and Johann Ludwig (1814-1874) and daughter Helene Wilhelmine (1810-1835). At the time of the foundation, Johann Christoph and his wife were 57 and 34 years old, respectively, and their children were 17, 13, and 9 years old, respectively.

Johann Christoph was the first of the five founders to die, just three years after the company was founded, at the age of 60 – his son Johann Ludwig was only 12 years old. His widow waited until 1839 to campaign for her son, now 25, to succeed him. She was met with considerable resistance, which she however overcame.



Johann Wilhelm Brinck
* July 22, 1773
† January 17, 1843

It was Johann Wilhelm – called Wilhelm – who owned the land on which the company now stands, and who lived and worked here as a farmer and miller. But he was not just a miller, he was a far-sighted landowner. Through his many years as a municipal councilor, he probably recognized early on – just like Theodor Altenloh – the upswing that the local metalworking industry could take. On his property, he operated a mill and a grist mill on the Ennepe River and, in addition to valuable water rights, owned a hammer pond as a water reservoir.

When the company was founded, he contributed his traditional mill and water rights free of charge. In the contract, it was agreed that he would demolish his mill in order to build the joint factory here with the company's capital. In addition, he contributed 1,000 Reichthalers to the company's capital, i.e., 1/5 of the total capital.

Johann Wilhelm was married to Henriette Höfinghoff (1777-1863), with whom he had four children: Caroline Henriette (1805-1865), Johann Wilhelm (1809-1869), Franziska (1812-1886) and Karl (1819-1840). At the time of the company's forming, he and his wife were 50 and 46 years old, respectively, and their children were 18, 14, 11, and 4 years old. He saw the company grow for 20 years and died at the age of 69.

Contemporary couple running a hammer mill – visible in the background





Franz Arnold Riecke
* April 3, 1777
† June 6, 1867

Franz Arnold came from a family of entrepreneurs who ran the national trading company Johann Eberhard Riecke & Söhne in Remscheid. So he was not directly on site, but only about 25 kilometers away. It took about three to five hours to get there by horse or two to three hours by carriage.

His contribution to the company was good sales contacts and extensive trading experience. As early as 1810, his family's business had sought to establish an iron and steel factory in order to avoid being restricted by the existing customs borders and to be able to trade raw materials with France duty-free. In addition to his valuable experience and contacts, he contributed an interest-free advance of 4,000 Reichsthalers, or 4/5 of the total capital. At that time, such a fortune would have been enough to buy a solid farm and secure one's livelihood. As a merchant from Remscheid, he was primarily an investor and less involved in the day-to-day running of the company, although he did help determine its direction.

Franz Arnold's first marriage was to Dorothea Brand (1787-1814) in 1807, with whom he had two children: Mathilda (1808-1871) and Johann Eberhard (1812-1894). In his second marriage, in 1818, he married Henriette Brand (1789-1842), the younger sister of his deceased wife, with whom he had another son, Gustav (1819-1883). The godfather of all three of Franz Arnold Riecke's children was again the co-founder Wilhelm Brinck, which shows how close the relations had been for a long time. At the time of the company's founding, he and his second wife were 46 and 34 years old, respectively, and their children were 15, 11, and 4 years old.

He outlived all of his co-founders, reaching the oldest age of them all at 90, so he was able to watch the company grow for more than 44 years. When he died, his granddaughter Carolina Riecke (1843-1896) was already married to her husband Friedrich Wilhelm Rocholl (1839-1917) and was expecting a child, Hermann Rocholl (1867-1945) – the first of three descendants having the identical name in the generational line.



Honoring the founders
ABC commissioned this replica of a 20th-century table and chairs set to honor its founders. The design of the set is based on the Biedermeier style of ABC's founding period. The names of the five founders are engraved in the embedded metal ring. This furniture was used by the ABC management for a long time in the 20th century.

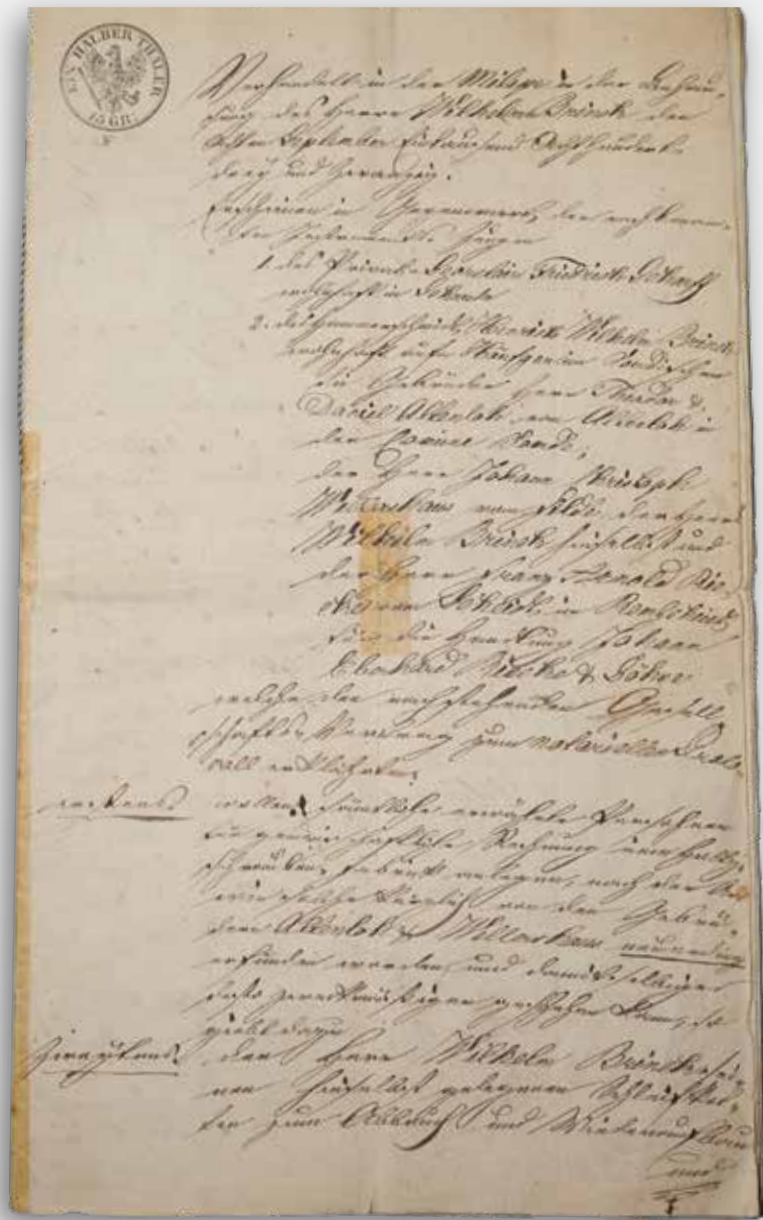
The constellation at the time of the company's founding

The Altenloh brothers and Johann Christoph Wellershaus had probably already experimented with the factory production of wood screws before the company was founded. They were the technological innovators and thus the visionaries and idea generators of the company. According to the founding document, they were responsible for furnishing the buildings and for purchasing and developing the necessary machinery and equipment. The Altenloh brothers, together with Brinck, were to manage the establishment and operation of the company on site.

The capital required to establish the company came from Riecke and Brinck, a total of 5,000 Reichsthaler. This was of central importance, because at that time it was extremely unusual to use lenders outside of one's own company or family. The first local financial institution did not open until decades later, the Sparkasse zu Enneperstraße [loan and savings bank] in Hagen-Haspe in 1856.

The name of the company itself – Altenloh, Brinck & Compagnie – reveals the names of only three founders. The other two founders, Wellershaus and Riecke, operated as “Compagnons” under the name Compagnie. From the point of view of the founders, the persons mentioned by name were probably the most important ones for the innovative project, its operation and realization.

The founding document was signed on Monday, September 8, 1823 at Brink's home. In it, the founders agreed to bear all costs equally – one fifth each. The Altenloh brothers, together with all the others, were responsible for the sale of goods. In case of disagreement, the majority of the shares would decide, in accordance with the emerging democratic principles of the time.



Founding document of the five shareholders

Recorded in the Milspe in the residence of
of Mr. Wilhelm Brinck on the
eighth of September one thousand eight hundred
twenty and three.

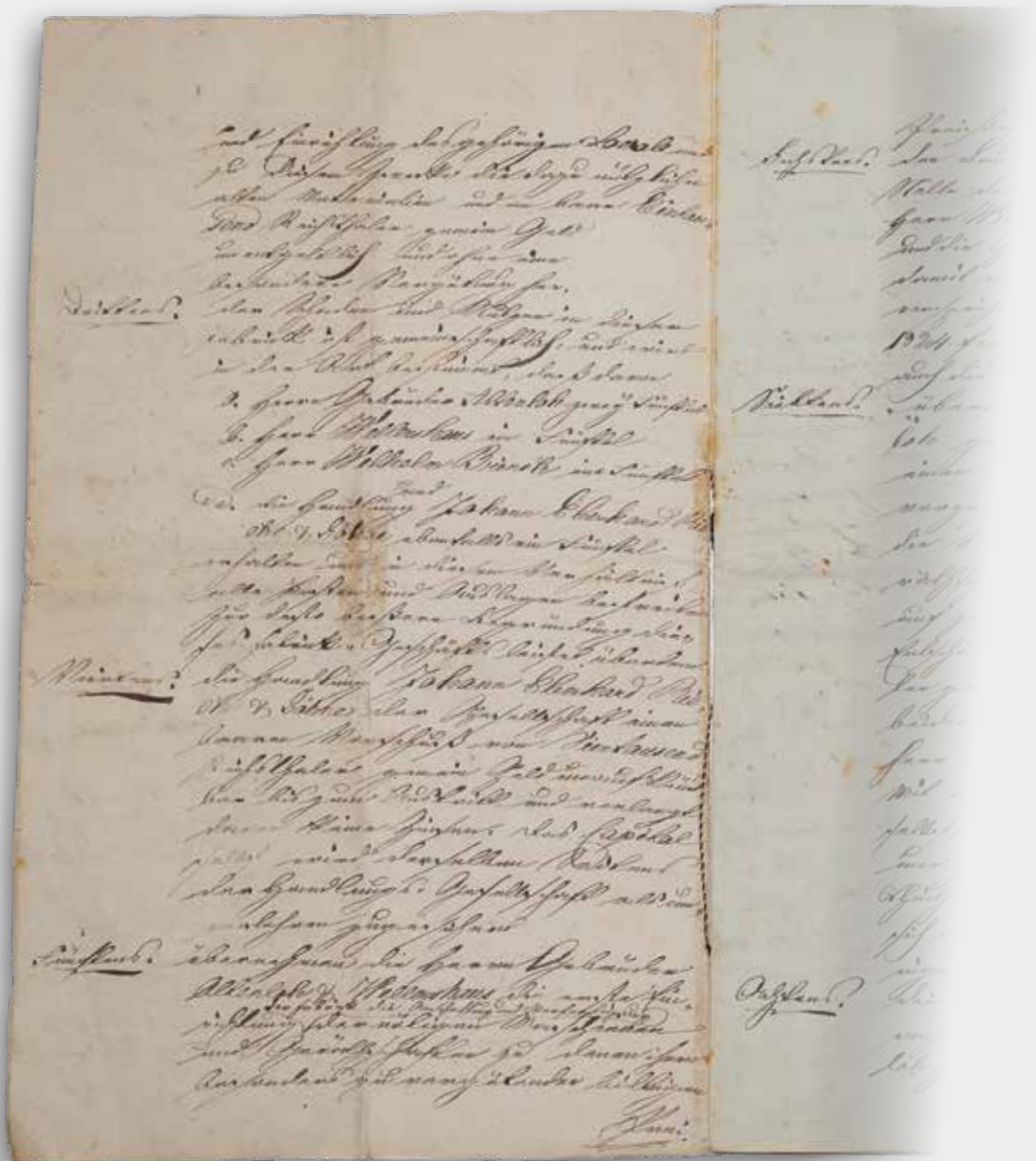
Appeared in the presence of the
witnesses to the [recorded] undertaking
1. of the private [...] Friedrich [Scharff],
residing in Schwelm

2. the hammer smith Heinrich Wilhelm Brinck
residing in Häufgen in Voerdischen
the brothers Mr. Theodor &
Daniel Altenloh from Altenloh in
the community of Voerde,
Mr. Johann Christoph
Wellershaus vom Felde, Mr.
Wilhelm Brinck himself and
Franz Arnold Rie-
cke vom Scheidt in Remscheid
acting for Johann
Eberhard Riecke & Sons

which have signed the following Articles of
Association to the notarial [...]

first all of the above-mentioned persons want to
set up a wood-screw factory
for joint account, after the kind of
as recently invented by the brothers
Altenloh & Wellershaus [newly]
and so that this can be done
more expediently, so

second Mr. Wilhelm Brinck has given his
own grinding pits for demolition
and reconstruction

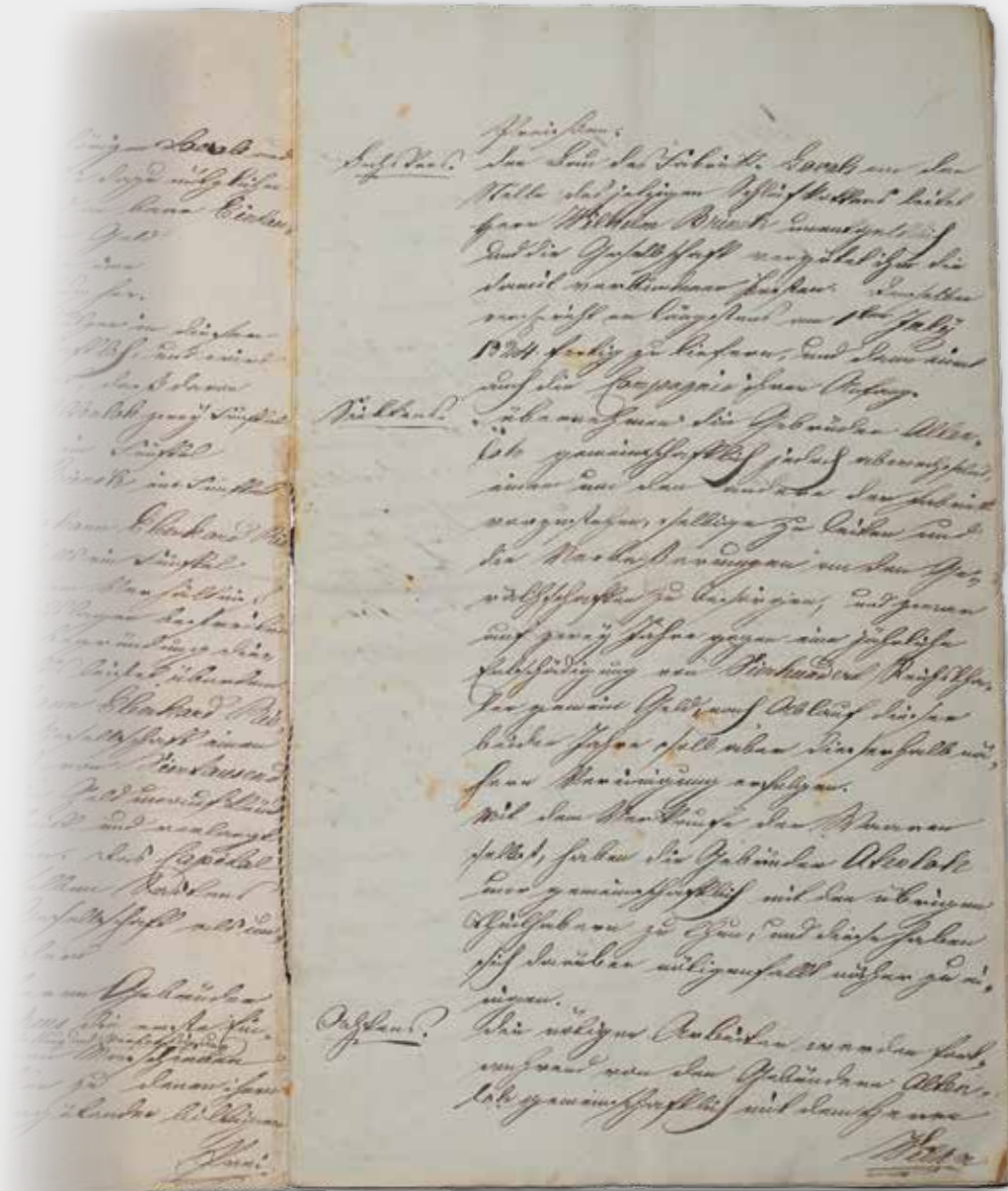


and establishment of the belonging beforehand and
for this purpose the possible
old materials and the cash deposit
of one thousand Reichsthalers in common money
free of charge and without
special remuneration.

third any damage and [...] in this
[...] shall be borne joint and several and shall be
determined in such a way that
a. Mr. Altenloh brothers shall receive two fifths
b. Mr. Wellershaus one fifth
c. Mr. Wilhelm Brinck one fifth
and
d. the company Johann Eberhard Rie-
cke & Söhne also receive one fifth
and in this proportion
bear all costs and expenses
for the better establishment of the
of this factory business [...].

fourth the merchant Johann Eberhard Rie-
cke & Sons has granted the company
a cash advance of four thousand
Reichsthalers in common money irredeemable
until [...] and shall demand
no interest on it, the capital
itself will be [...] granted
to the trading company as
[...].

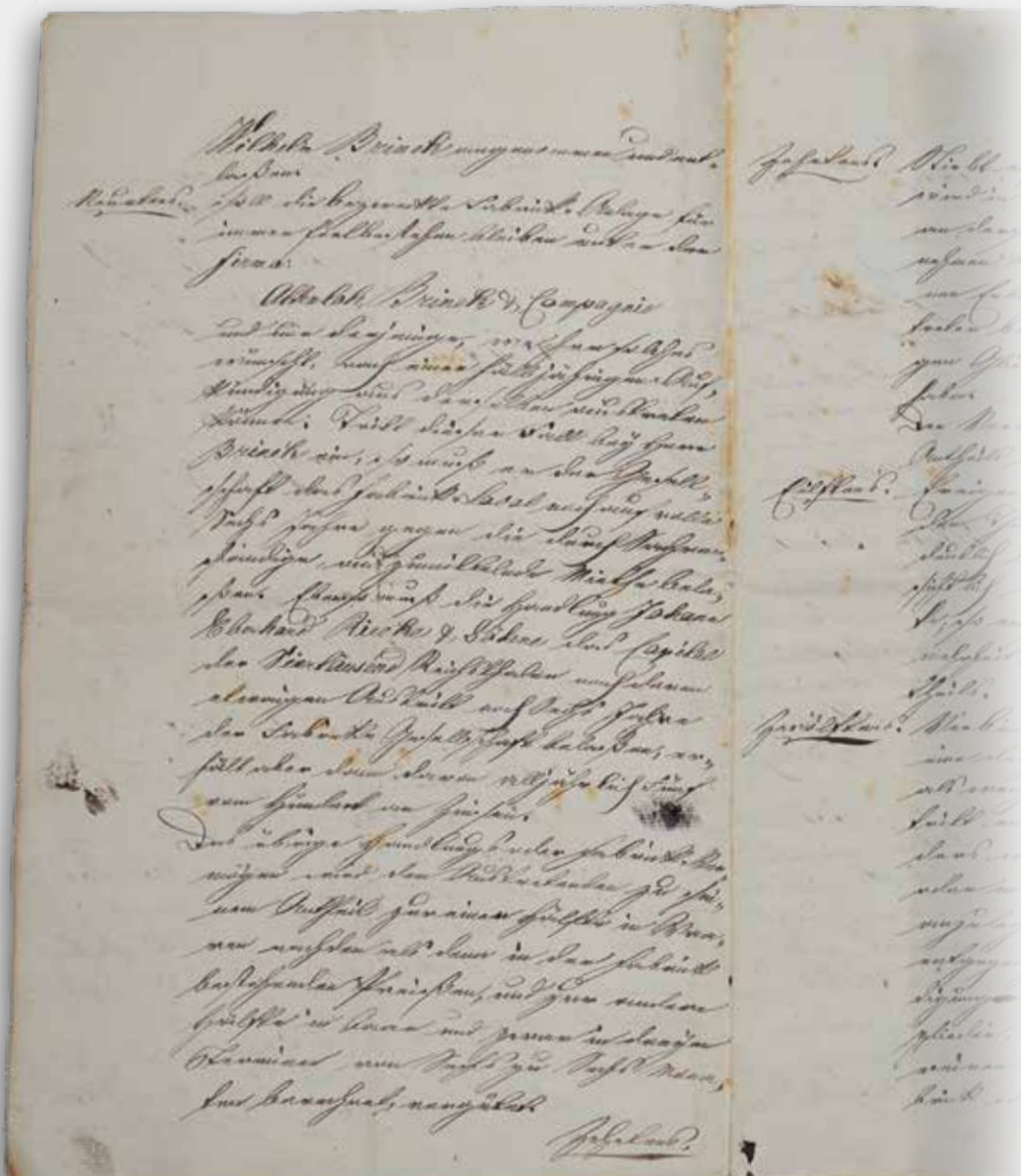
fifth the brothers
Altenloh & Wellershaus are responsible for the first
setup of the buildings, the acquisition and utilization
of the necessary machines
and equipment
at the special [cheap] prices to be paid to them
separately.



sixth the construction of the factory area on the place of the present grinding mill
Mr. Wilhelm Brinck offers free of charge and the company will reimburse him for the associated costs. [...]the same promises to deliver at the latest on July 1, 1824, and then the company shall also commence.

seventh the Altenloh brothers jointly, however [...] take on to preside over the factory one by one, to manage the same and the sales of the goods, and to [...] the improvement of the machinery [...] for two years against an annual compensation of four hundred Reichsthalers in common money, after the expiration of these two years, however, this shall be followed by a more detailed agreement.
Regarding the sale of the goods, the Altenloh brothers themselves are only jointly dealing with the other part-owners, and the other part-owners shall, if necessary, come to an agreement.

eighth The necessary work will be carried out continuously by the Altenloh brothers together with Mr.



Wilhelm Brinck and [...]
ninth the intended factory - plant shall continue to exist under the name of Altenloh, Brinck & Compagnie and who wishes to do so, after six months' notice may resign from it.
If this occurs in the case of Mr. Brinck, he must still leave the company the factory building for full six years against a rent amount to be determined by experts.
Likewise, the company Johann Eberhard Riecke & Sons must leave the capital of the four thousand Reichsthalers for six years after their potential resignation, but then receives their annual interest of five of a hundred.
The remaining assets of the company or factory shall be paid out to the resigning party in proportion to their share, half in proportion to the amount of goods in the factory according to the prices existing, and the other half in cash, in three instalments of six to six months.

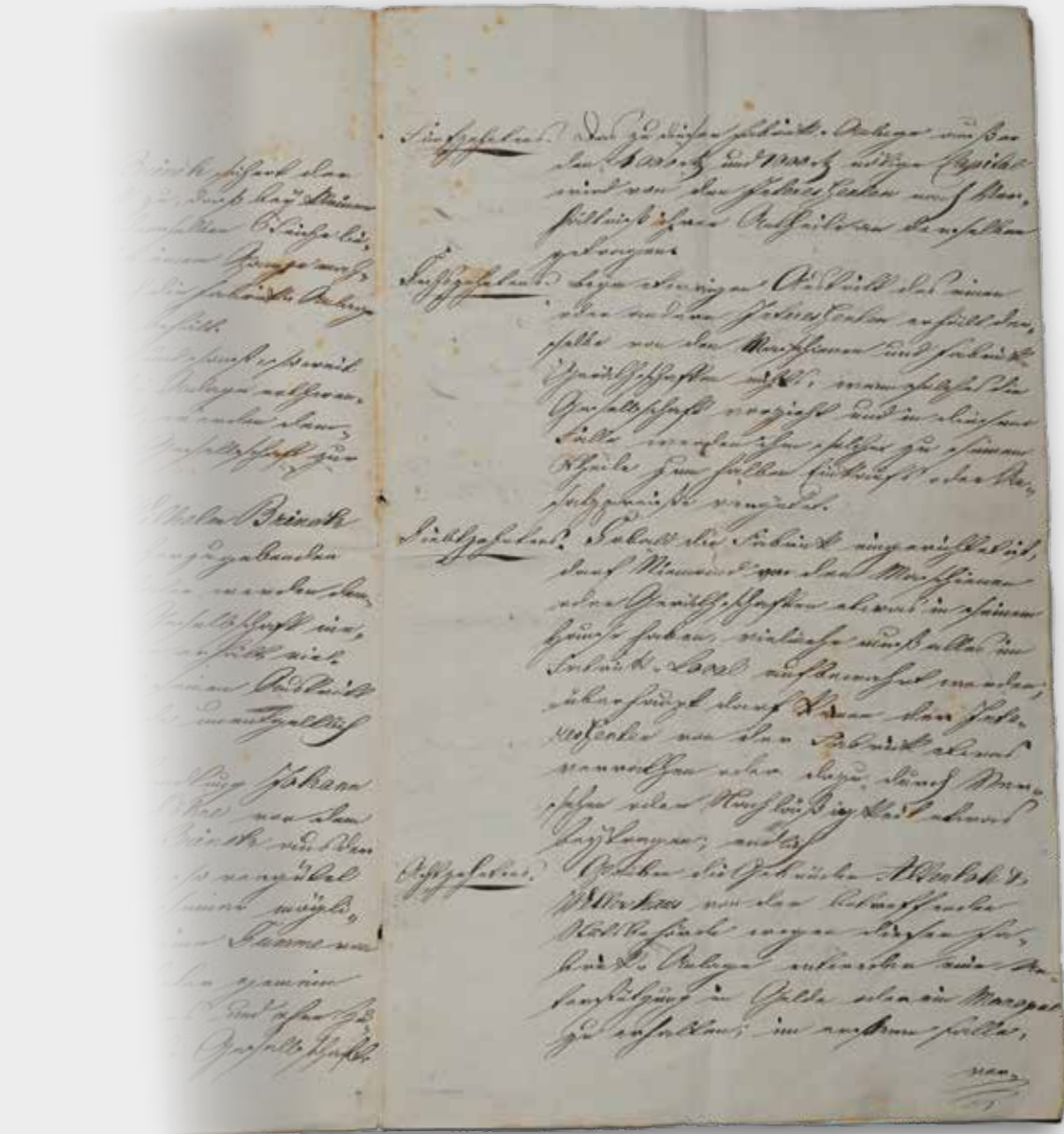
tenth If a factory shareholder dies or is put into the position that he cannot take part in the same, afterwards he or his heirs must appoint a substitute in his place. Heirs must appoint a deputy in their place with whom the other [...] shall deal alone.
The sale or disposal of the share in the factory shall take place [...].

eleventh If contradictions occur among the part-owners about which nothing in this may be clearly determined or by taking the management of the business into consideration, the majority of votes shall decide, pursuant to the amount of the share.

twelfth All the partners agree not to establish such a factory at the time of their potential resignation, either here or anywhere else, either for themselves or in association with others and submit themselves to a compensation to the other members of the company, when acting to the contrary, which shall be calculated on the basis of ten times of the net income of such the existing fabric or year of operation.

thirteenth Mr. Wilhelm Brinck assures the factory company that, in the case of low water his mill in front of the same pond may only grind in one facility, so that the factory plant has access to the necessary water.
Half of the costs for the pond and otherwise, as far as they are necessary and useful for the factory plant, shall be borne by the company.

fourteenth The mentioned one thousand Reichsthalers to be paid by Mr. Wilhelm Brinck shall be paid by him to the company once, upon his resignation, he shall receive instead the factory building free of charge.
However, if the company Johann Eberhard Riecke & Sons resigns before Wilhelm Brinck from the partnership, then they shall pay him a sum of compensation of three hundred Reichsthalers in common money, in particular and without any action by the company.

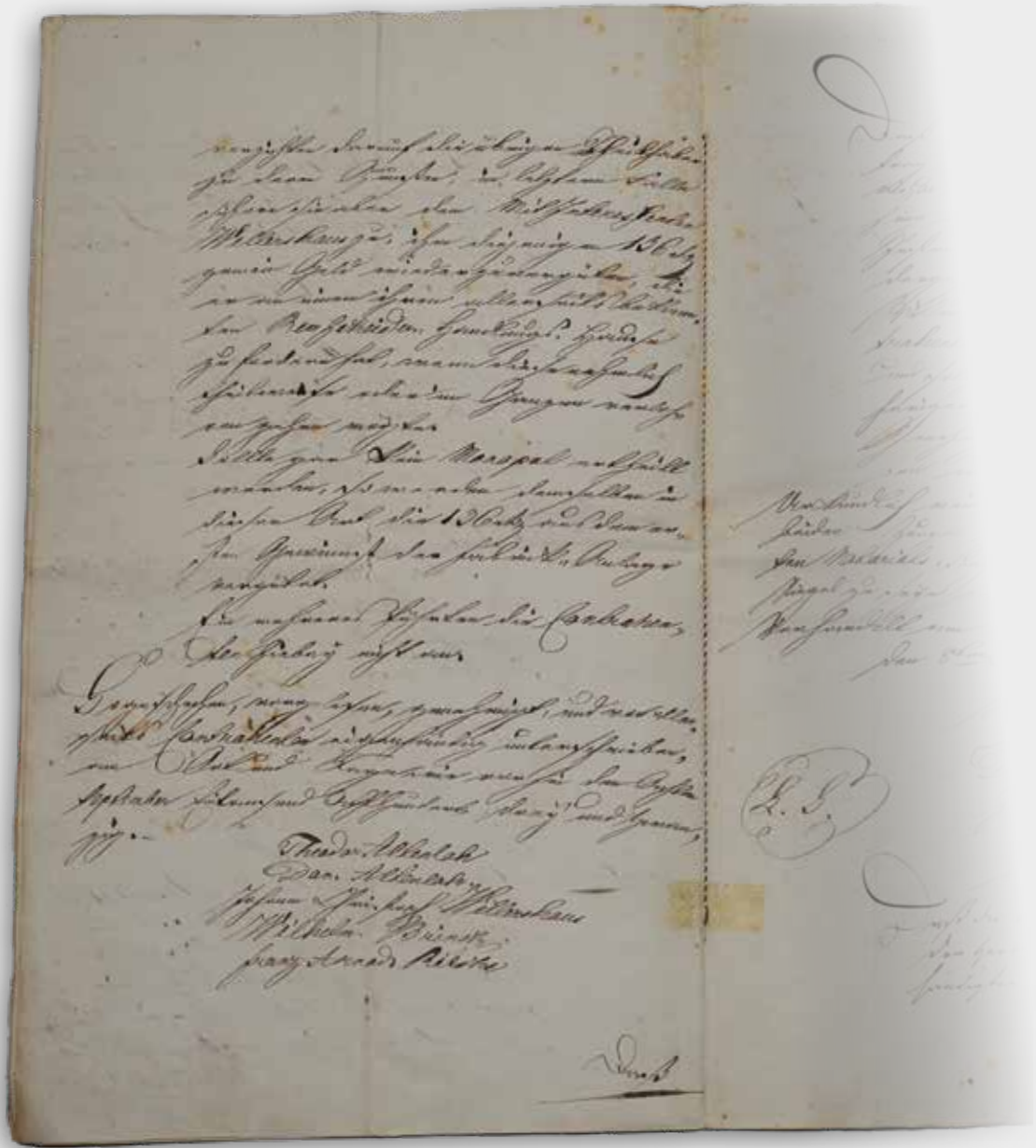


fifteenth The capital required for this factory, apart from the 4000 Reichsthalers and 1000 Reichsthalers will be paid by the interested parties in proportion to their shares in the same.

sixteenth In the event of the resignation of one or other interested party, the same shall receive [nothing] of the machines and factory - equipment if [...] the company prefers it that way and in this case, he shall receive such money based on his share of the purchase or [...] prices.

seventeenth Once the factory is set up, no one may use any of the machines or equipment in their home, rather everything must be kept in the factory building; In general, none of the interested parties may betray anything regarding the factory, or do so by concealment or negligence; finally,

eighteenth The Altenloh Brothers & Wellershaus believe in regard to the concerned [...] because of this factory plant to receive either a support in money or a monopoly; in the first case

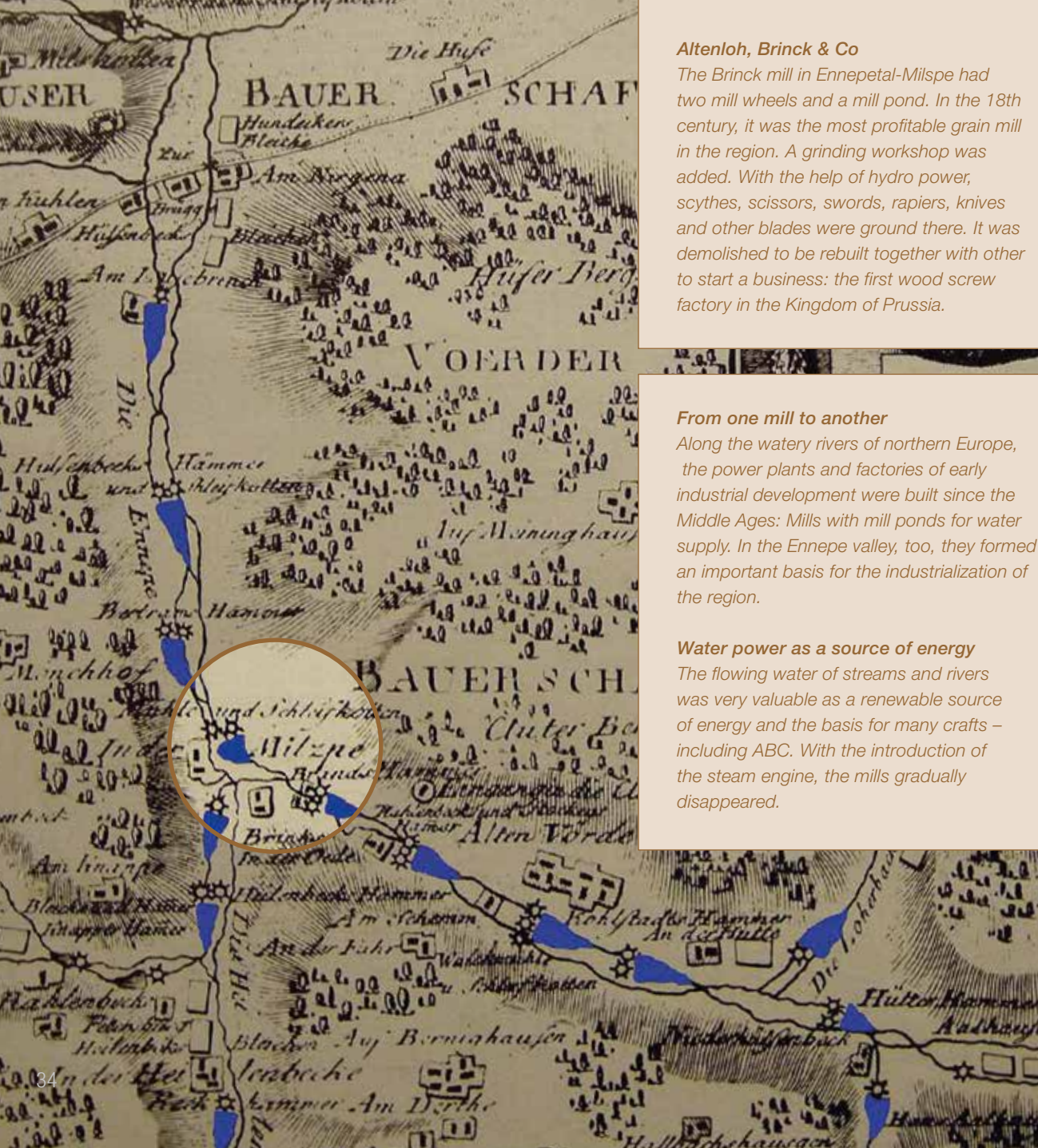


the remaining part-owners shall waive in their favor; but in the latter case they assure the co-interested party Wellershaus to reimburse him those 136 Reichsthalers in common money again, which he had paid to a well-known Remscheid trading house to [...], should these be in part or in its entirety forfeited. Should no monopoly be granted at all, the 136 Reichsthalers shall be reimbursed from the first profit of the factory plant. The contracting parties did not specify anything else here.

Done, read aloud, approved and signed by all the contracting parties with their own hands, on the day and place as before [...] the eighth of September One Thousand Eight Hundred Twenty and Three..

Theodor Altenloh
Dan. Altenloh
Johann Christoph Wellershaus
Wilhelm Brinck
Franz Arnold Riecke

1823 - 1826:
The early years



Altenloh, Brinck & Co

The Brinck mill in Ennepetal-Milspe had two mill wheels and a mill pond. In the 18th century, it was the most profitable grain mill in the region. A grinding workshop was added. With the help of hydro power, scythes, scissors, swords, rapiers, knives and other blades were ground there. It was demolished to be rebuilt together with other to start a business: the first wood screw factory in the Kingdom of Prussia.

From one mill to another

Along the watery rivers of northern Europe, the power plants and factories of early industrial development were built since the Middle Ages: Mills with mill ponds for water supply. In the Ennepe valley, too, they formed an important basis for the industrialization of the region.

Water power as a source of energy

The flowing water of streams and rivers was very valuable as a renewable source of energy and the basis for many crafts – including ABC. With the introduction of the steam engine, the mills gradually disappeared.

When the contract was signed in September 1823, the five founders had agreed that their company would start operations no later than July 1, 1824. However, before the new factory could be built, Brinck had to demolish his old mill.

Hydro power as an important source of energy

Just how valuable Brinck's land and especially his water rights were, can be seen on the map of the Schwelm High Court of 1788. It shows what had developed along many water-rich rivers in Germany since the Middle Ages and formed the basis for the economic development and early industrialization of the Mark county: a large number of mills with mill ponds for water supply. The power of the water was used as a source of energy for a wide variety of crafts, including sawmills, forges, and mills. For a long time, hydro power remained a central source of energy for many businesses.

Still no reference in 1823

In the Brinck mill, scythes, scissors, swords, rapiers, knives, and other blades were probably ground on hydro-powered grindstones, just as they were elsewhere. Since the demolition had to take place after the contract was signed, there is no mention of the screw factory in the official records of the Gevelsberg mayor's office for 1823. On the contrary, three workers are recorded for the mill – probably including the grinding mill – which corresponds to the usual size of an artisanal business at that time.

1824: Continued planning

At the end of 1824, the plans of Altenloh, Brinck & Co. are mentioned for the first time, explicitly as a wood screw factory. This was reported by the early industrial entrepreneur Moritz Heilenbeck (1773-1837). His task was to provide the mayor of Gevelsberg with an annual list of the factories and hammer mills operating in the Ennepe valley. In his report he wrote:

“Furthermore, still to be listed, for this year, in the following [list].

A wood screw factory at Milspe, which is laid out by Messrs. Riecke, Brinck, Altenloh a[nd] Wellershaus and has yet to come into operation. The company they will run is not yet known h[ere]; it is only to be included in such a next [list] for 1825.”¹

Early mechanical engineering – a challenge

Looking back, it is clear what a challenge the Altenloh brothers and Johann Wellershaus faced as inventors in the early years of the company. German mechanical engineering was still in its infancy. As in early English industrialization, it was the craftsmen themselves who had to become machine inventors, i.e., pioneers of mechanical engineering. It was only when they succeeded in developing machines for their trade that they were able to expand from their customary small-scale production to large-scale manufacturing. This became the basis for the technically and economically so promising factory system, a completely new way of organizing the commercial production of large quantities.



From the mill to the company

This is how the mill of co-founder Heinrich Wilhelm Brinck (1773-1843) could have looked like – here you can see the Behlinghammer, which stood a short distance below today's Ennepetal dam. Brinck was not only a farmer and miller, but also the owner of a mill with water rights. The company's headquarters are still located on his land.

First mention of ABC in 1825
The emergence of factories was closely observed during the early industrialization. The annual report to the mayor of Gevelsberg about the year 1824 mentioned the planning of the wood screw factory of “Messrs. Riecke, Brinck, Altenloh and Wellershaus”.

Mechanical workshops as development partners

It is not surprising, therefore, that there were delays and that the company was still in the planning stage and not in operation by the end of 1824. It is likely that the development of the production machines did not proceed as quickly as expected. This is shown by the correspondence with the most important development partner: the Mechanische Werkstätten Friedrich Harkort, founded in 1819 in Wetter an der Ruhr, 13 kilometers away. Harkort himself was an early industrial entrepreneur who had spent a long time in England, where he had acquired a great deal of knowledge. His Mechanische Werkstätten [Mechanical Workshops] supplied numerous companies in the region with both raw materials and machinery.



Friedrich Harkort
1793-1880

Cooperation in machine development

As the correspondence shows, ABC and the Mechanical Workshops had a lively exchange on the development of machines and presses. Both business partners worked hard to achieve a constructive cooperation regarding the development and to share the necessary knowledge. Suggestions for improvements were made, rejected, and changes suggested. ABC obviously benefited from Harkort’s enthusiasm for technical innovation.

Development as a protracted approach

Between June and December 1824, ABC repeatedly ordered presses, but the number of machine parts ordered always remained small. Each time, the company seems to have gotten closer to a suitable and working design. After each new usability test, more parts were ordered. This procedure also caused delays, as the correspondence shows. In December 1824, for example, ABC urged that the ordered castings be delivered and that the wooden models be returned. For this purpose, a wagoner was sent to pick up the order, as the parts were urgently needed, as ABC politely but clearly requested, “We are very much in need of the ordered presses.” Elsewhere it is stated, “it is our wish that you hasten to assist us with this.”²

1825: Breakthrough and approval

In the following year, the breakthrough in the development of a process for the mechanical production of wood screws must have finally been achieved. This is documented in the official gazette of the Arnsberg administrative district dated August 13, 1825. In it, the commercial activity for a specific manufacturing process was authorized throughout the Kingdom of Prussia – for eight years. It was expressly excluded that the patent applied to machines in use, e.g., the “turning machine for cutting the wires” or the “machine for cutting the screw threads.”³



“The Altenloh brothers and Wellershaus at Vörde in the district of Hagen have been granted a patent on January 28 of the c[urrent year], valid from this day through eight successively following years, throughout the whole realm of the Monarchy, for the sole use of the procedure described by them for the mechanical fabrication of wood screws in all that this entails, but not for the several known operations [...] turning machines for cutting wires, as well as at the machines for incising screw threads [...]”³

The Prussian state had great interest in the industrial development. It was promoted and documented. The official gazette for the administrative district Arnsberg reported the founding of ABC on Aug. 13, 1825.

No protection of intellectual property yet

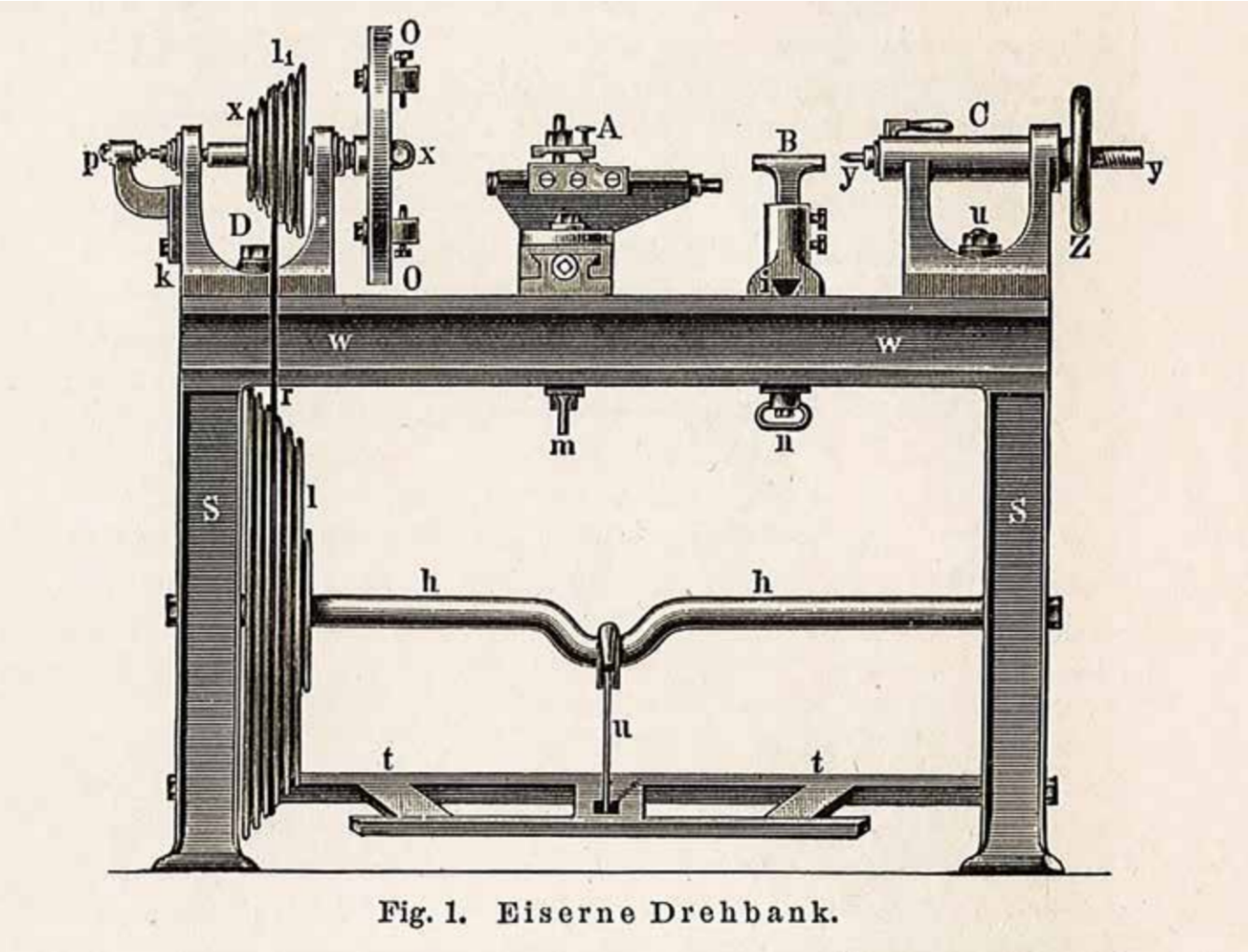
Looking back at the company's own history, the early industrial term “patent” was long interpreted in the sense of a modern patent. In fact, modern German patent law, and with it the modern understanding of a patent as intellectual property protection, did not exist until 1877. In 1825, it was legally irrelevant where the ideas of the three inventors, the Altenloh brothers and Johann Wellershaus, came from and what they were in detail.

Concession for trade and commerce

Nevertheless, the patent of 1825 was of great importance for the emerging company – it secured the rights or authorized the commercial activity with a certain process. It is clear that the state regulated trade and commerce. The guild-organized craftsmen of the cities were competing with the rural craftsmen or the newly emerging factories.

Carl Lienkämper: From apprentice to confidant

One of the first and longest-serving factory workers in the early days of ABC was Carl Lienkämper. He began working for the company in 1825 – perhaps as an apprentice – and worked his way up to master craftsman. As such, he probably witnessed, and perhaps even helped to advance, many of the critical steps in the development of machines and production. Through his long and dedicated service, he became not only a key employee for the founders and their descendants, but also an important confidant.



Iron lathe in the middle of the 19th century operated by a foot step

The first inventory 1825

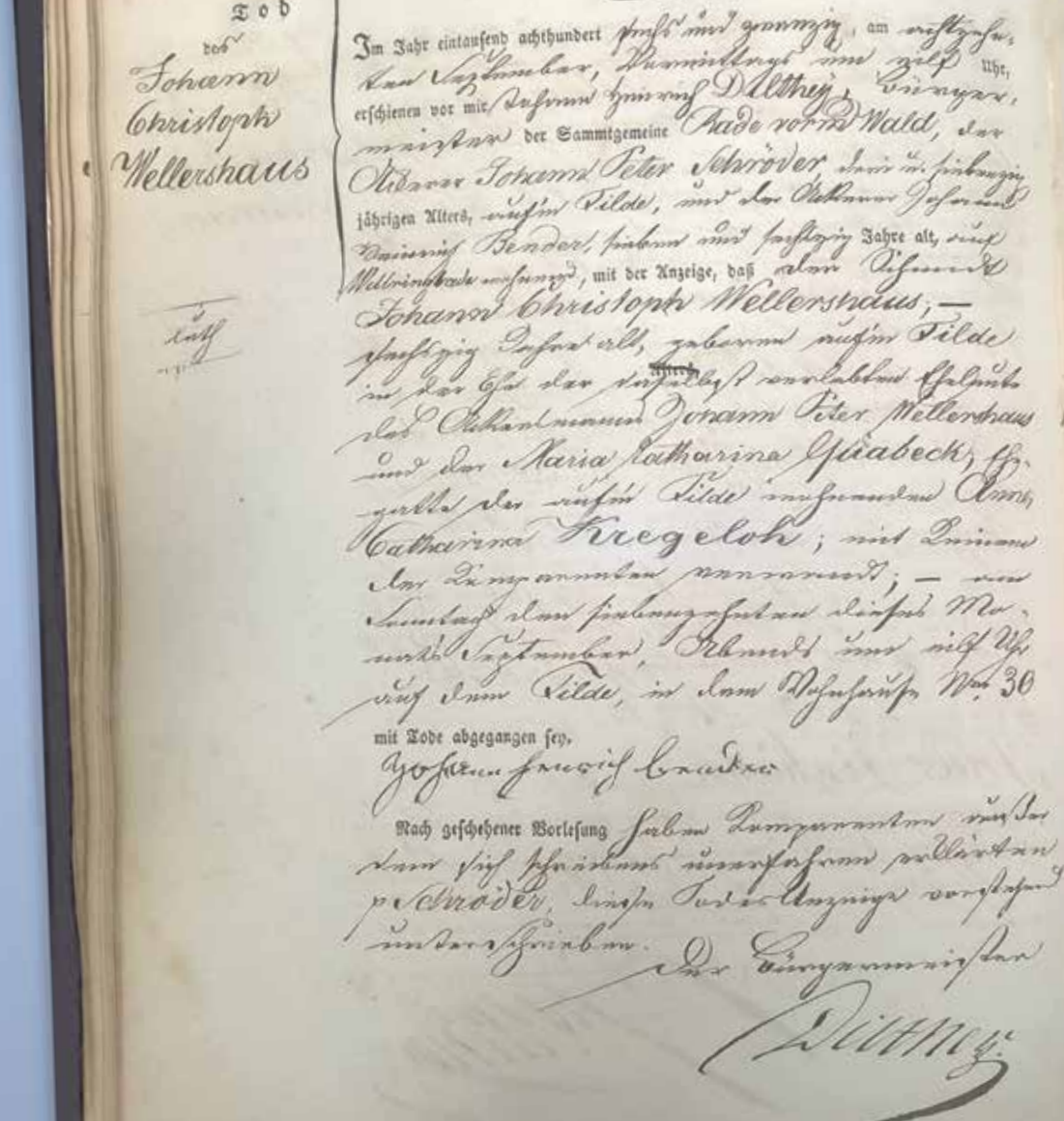
A handwritten record shows the inventory of the Altenloh, Brinck & Compagnie factory in 1825, the year of the „patent“: 4 water presses, 18 hand presses, vices, 28 small lathes, 2 wire cutting benches, 3 large lathes, 1 drilling machine, 5 clamps, 72 machines for cutting screws, 16 machines for cutting heads, finished screws and wire in stock. This first factory equipment consisted of simple tools that were operated by hand, except for the four water presses – otherwise it would have been mentioned that they were driven by a water wheel with transmission belts. Nevertheless, the tools and machinery were obviously of considerable value, as they were already insured.

Simple tools and machines

With this equipment it was possible to produce nails, which were then threaded on the lathes. The heads also had to be cut in a separate operation. This meant that at least five different operations, involving a great deal of manual work on separate devices or machines, were required to produce the finished screw.

1826: Death of the co-founder Wellershaus

Johann Christoph Wellershaus was the eldest of the five founders. He died at the age of 57 on September 17, 1826, when the company was only three years old and experienced its first boom. On the one hand, they had mastered the difficult initial phase, but on the other hand, they were preoccupied with various problems of building up the company. The question of who should succeed him was raised much later, in 1839, by his widow.



The death certificate of Johann Christoph Wellershaus is one of the few documents available from him.

1827 - 1850:
Further development and expansion

After the first few years, Altenloh, Brinck & Compagnie continued to remain in its business field during the early industrialization of Germany. ABC benefited from its pioneering role and at the same time struggled with Germany's backwardness and the resulting problems.

German early industrialization

After 1815, a gradual economic development towards industrial production with more and more large-scale structures began. While large parts of the pre-industrial economy were based on crafts and agriculture, from the mid-1840s onward there was increasing economic growth in various branches of industry. The foundations were laid for what would later become the leading heavy industries: railroads, iron and steel, coal mining, and mechanical engineering. For the states, industrialization had become a key factor in taxation and power politics. Within Germany, the Rhineland-Westphalia region, home of ABC, remained a pioneering and key region.

Screws as a key product

Screws were an important product for the growing industry. The formation and further development of Altenloh, Brinck & Compagnie was aimed at precisely this key product. An alternative or complementary product was not considered – even if the term “nails” is occasionally found in early sources. For example, a letter from 1838 states, “*yesterday we finished taking in the stock and the nails in progress.*”¹ Either the term was simply confused, or nails were also produced because of their similar shape, but without a thread. It is more likely that this was the preliminary product, because even today screws are called “nails” after the first production step, if they do not yet have a thread. One thing is certain: from the very beginning, screws were ABC's core product, nothing more, nothing less.

Historical witness: The letter copy book

In the course of the historical development of Altenloh, Brinck & Compagnie, some papers and objects – including the products – were lost, but one very valuable document was preserved: the letter copybook from 1836 to 1857. In order to keep track of the company's correspondence, all important letters of the time were recorded and their contents noted in short form. Today, it provides a revealing glimpse into the company's past.

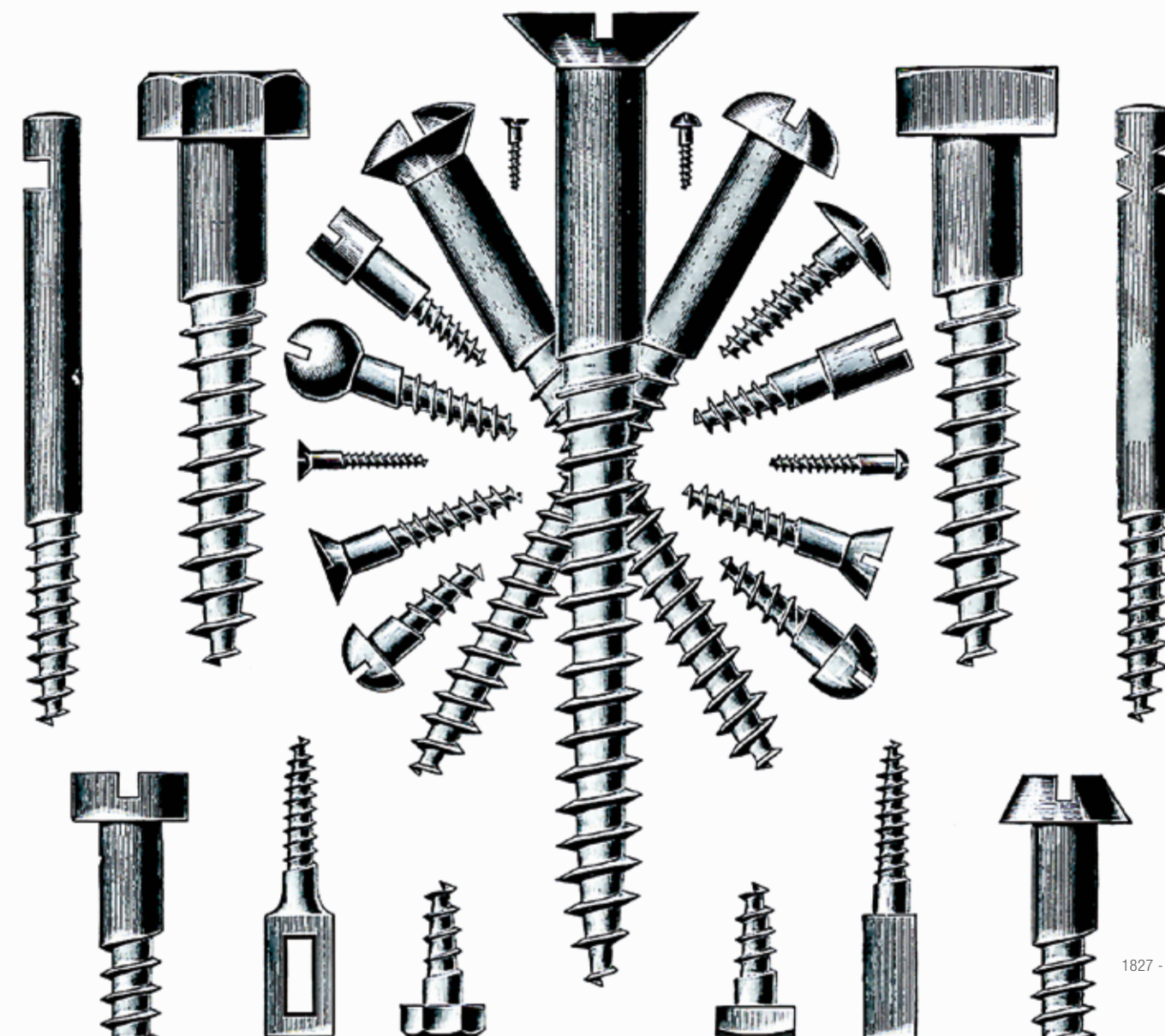
Customized screws according to customer requirements

What screws were produced was decided in consultation with customers. There was no standardization yet, and customs dimensions varied from state to state. The customers therefore formulated their requirements and ABC reported back what was producible or available. Especially in the first years, a process of coordination and negotiation between demand and production possibilities was necessary.

ABC Letter Copy Book

ABC's letter copy book provides a variety of insights into business performance, challenges, and decisions. In the days before carbon copies or even e-mail, outgoing business letters were collected here to keep track of them.

Holzschrauben.



Wood screws from the anniversary catalog by Funcke & Hueck from the year 1894

Manufacturing according to sample

Production was always based on samples. The screws had to fit because they were often intended for a specific piece of equipment or machine and could only be used according to that specification. Sample cards were used to present the current production scope to customers and to offer discounts. A common phrase used in offers was:

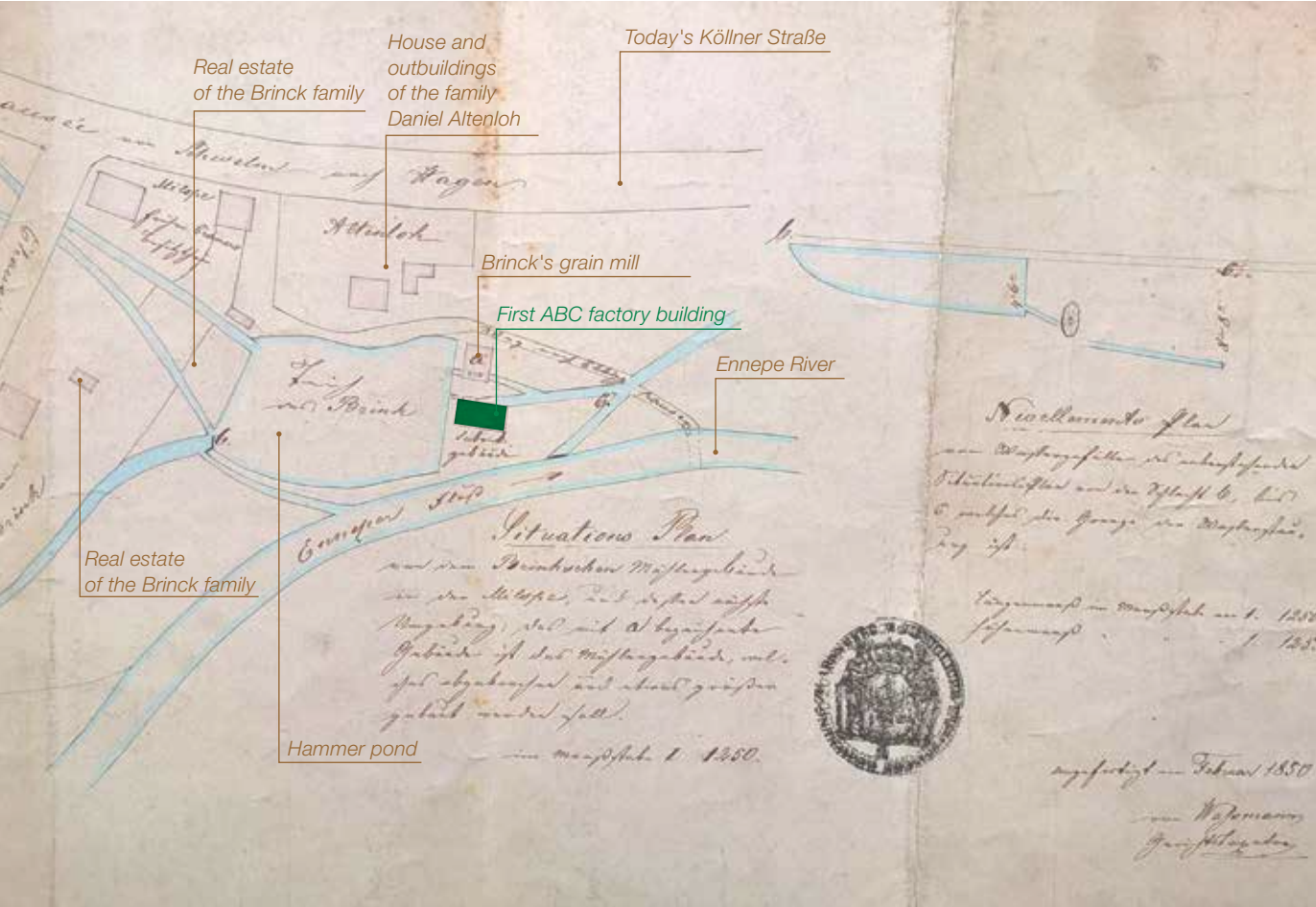
*“our wood screws [...] at low prices and with 15% discount.”*²

The challenge of new production methods

The production of machine-made screws was still in its infancy. The advantages were promising and compelling – higher volumes and more consistent production. Until around 1840, ABC was a pioneer in this field and had to constantly find solutions to the problems that arose. It was still a field of completely new production methods and new processes in the management of material procurement and the corresponding quantities.

The challenge of operational management

The modern form of business and management was still in its infancy, so it was necessary to develop a balanced business strategy to overcome the many challenges. After all, more than a few early industrial entrepreneurs failed – including Friedrich Harkort (1793-1880), who was an important development partner of ABC in the early years with his Mechanische Werkstätten [Mechanical Workshops].



First ABC site plan from 1850

Products in demand

The demand for high-quality screws in large quantities was significant. However, because factory operations remained difficult for a long time, delivery times for individual orders were often several months. There could be many reasons for this: the quality of the wire supplied, the volume of orders received, problems with the company's own production conditions, and even the weather.

Supply difficulties due to high demand

The demand was often greater than the feasible production volume. This is stated in a letter from 1840 to the Lehrkind brothers, who were active in nearby Hagen-Haspe:

*“In polite reply to your honorable [letter] of the 15th of the month, it is not possible for us to deliver the screws placed on order with the specified date, we need a delivery time of at least 2 months, as we still have a lot of older orders to do and cannot put any others to work before they are ready.”*³

Water shortage threatens production

If the Ennepe had too little water or was frozen, it quickly became a problem for production. After all, hydro power remained an important and inexpensive source of energy long after the early years – even after steam engines had long been available. In February 1838, for example, a customer was informed, *“the screws ordered will be worked on when the thaw sets in.”*⁴ In September 1842, on the other hand, another customer had to be informed, *“that we have already stopped working for 8 days and no rainy weather is on the way.”*⁵



Production problems with water shortage

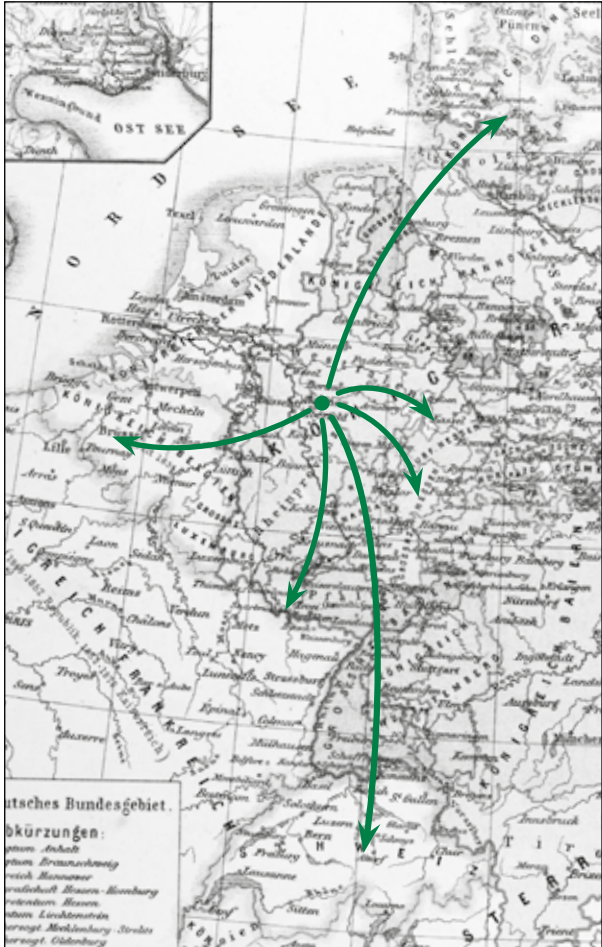
For a long time, ABC's production was dependent on the hydro power of the Ennepe River. During low water or heavy frost, production came to a standstill.

Good business development

The business development of Altenloh, Brinck & Compagnie progressed steadily during the first decades. Sales increased and the company's equipment was regularly expanded with new tools and machines. This is reflected in the insurance policies. In 1833, the insurance value was 10,000 Thalers – for a bricked factory building, equipment and machinery, as well as finished and unfinished goods. By 1843, the value had risen to 19,650 Thalers, and by 1848 to 23,900 Thalers. Compared to 1825, the stock of machines for lathing, turning and cutting had almost doubled – although a number of machines and presses were still operated manually.

Co-founder Riecke as the first ABC merchant

One of the first and most important trading contacts was the trading company of co-founder Riecke. The company had extensive knowledge of existing trading structures and practices and a promising network of trading contacts. Riecke was also able to represent ABC well on his business trips. In July 1830, for example, he was asked to promote ABC's wood screws in Brabant, now Belgium and the Netherlands, on his next trip to Paris. At the same time, costs were kept under control: Expenses were reimbursed only for visits that deviated from his actual route.⁶



ABC's trade contacts expanded rapidly.
Regional trade relations became supraregional.

Launch with regional merchants and customers

Early on, the company was in contact with important regional merchants. These included the trading houses of Asbeck & Cie in Ennepetal-Voerde and Johann Dietrich Post in Hagen-Eilpe, and the renowned firm of Johann Caspar Harkort from Hagen-Haspe. They took ABC screws on commission and traded them, whether in northern Germany, Belgium, Austria or Switzerland. Over time, ABC developed its own customer base. At first, they came mainly from the immediate vicinity, but increasingly also from more distant places, be it Frankfurt/Main, Offenbach, Mainz, Heidelberg, Regensburg, Augsburg, Leipzig, Hamburg, Bern or St. Gallen.

Innovative showcase customers

In 1830, for example, one of the first German railroads was among the regional customers: the horse-drawn narrow-gauge railway for transporting coal from nearby Gevelsberg-Silschede to Hagen-Haspe. Their own development partner, Maschinenfabrik Kamp & Cie, formerly Mechanical Workshops of Harkort were supplied as well. An important customer with a good reputation was the Württembergische Donau-Dampfschiffahrtsgesellschaft [Danube Steamship Company] in Regensburg around 1840. At the time, steamships were an absolute novelty and an attractive showcase project.



New and attractive business customers for ABC: Danube Steamship Company around 1830

Overcoming trade barriers

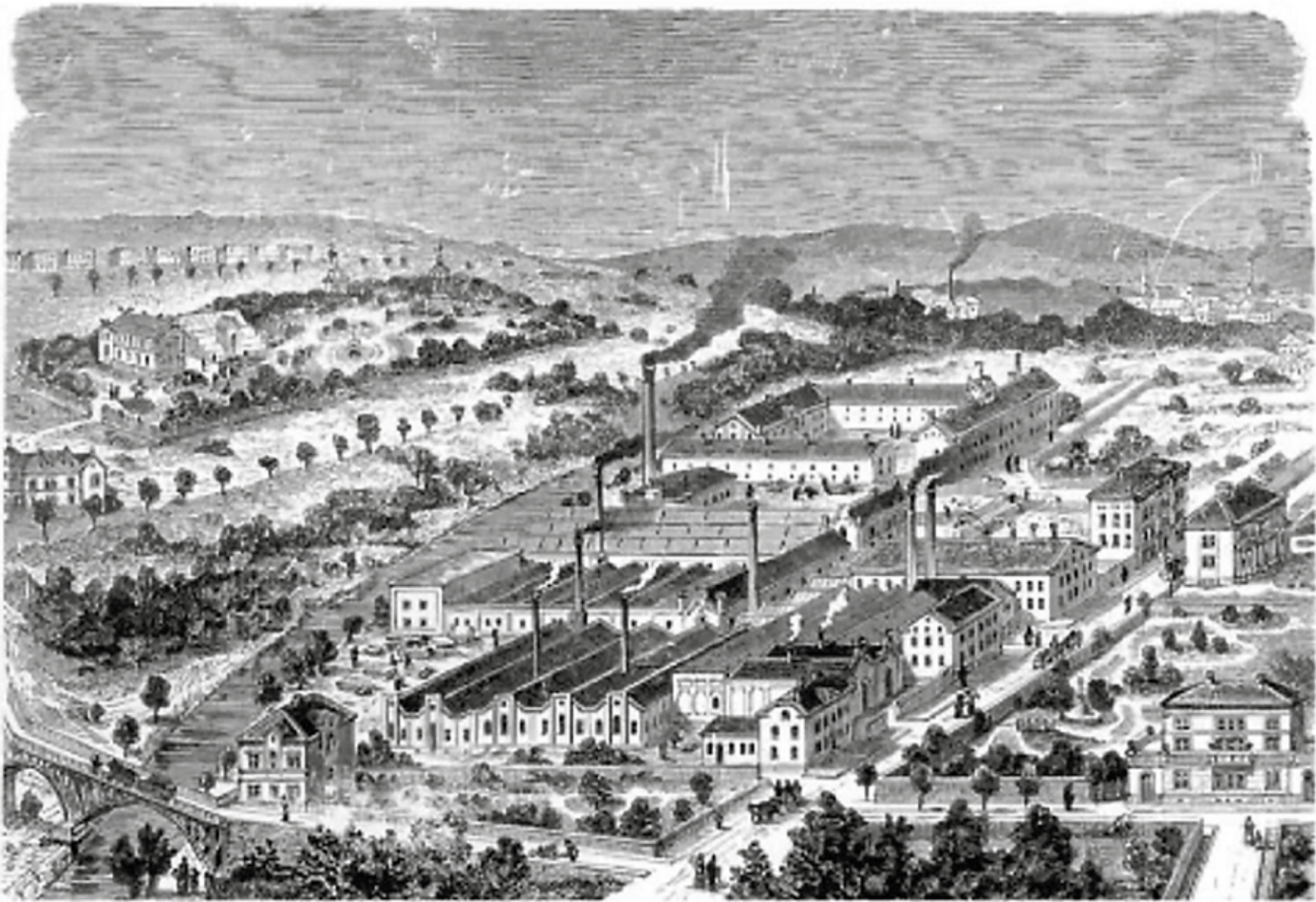
As early as 1837, there were merchants in Switzerland who sold ABC's products. Now a company there asked for direct delivery. This was attractive, and one was prepared to meet the special requirements. On the other hand, the procedure remained risky – there was a risk of alienating the company's own Swiss merchant, of encountering problems with customs barriers, and of defaulting on payment. The company did not yet have its own contacts in Switzerland and was therefore unable to assess whether a customer would be able to pay. So they proposed secrecy and the intermediation of a guaranteeing trading house:

So “we will be glad to offer you a business connection if you will give us the name of a reputable and well-known trading house with which we can make inquiries about you or which will vouch for you. You will not misinterpret this as an imposition if you consider that we are not allowed to inquire with the local merchants who travel through the region, since they all carry our sample card and would return it to us in any case if it became known to them that we were in direct contact with local companies.”

Handling of incorrect orders

Among the early customers was the forerunner of Gute-Hoffnungs-Hütte [steel mill], an international steel company based in the Ruhr region – then known as Jacoby, Haniel & Huysen. In 1840, screws were still made to order and the customer had placed a wrong order. The fact that ABC could not take back the delivery did not damage the business relationship, as was made clear:

Thus, “we regret very much that the 5/8 inch wood screws [with square] heads and 3 to 7 inches long in the last shipment were ordered in error [and] you have no use for them. As much as we would like to comply with your request to take them back, it is impossible for us to do so, as we assure you that we have not made such screws for any other company as long as our factory has existed, and therefore we have no use for them.”



First competitors

In the 1840s, the first competitors entered the wood screw market, led by Funcke & Hueck in Hagen (1844-1990). With the various emerging competitors, there were not only points of friction, but also opportunities for contact and support. It was not uncommon for people to help each other out in bottleneck situations or to make arrangements. Still, growing competition changed customer demands and pricing. In 1847, for example, a customer in Berlin was told:

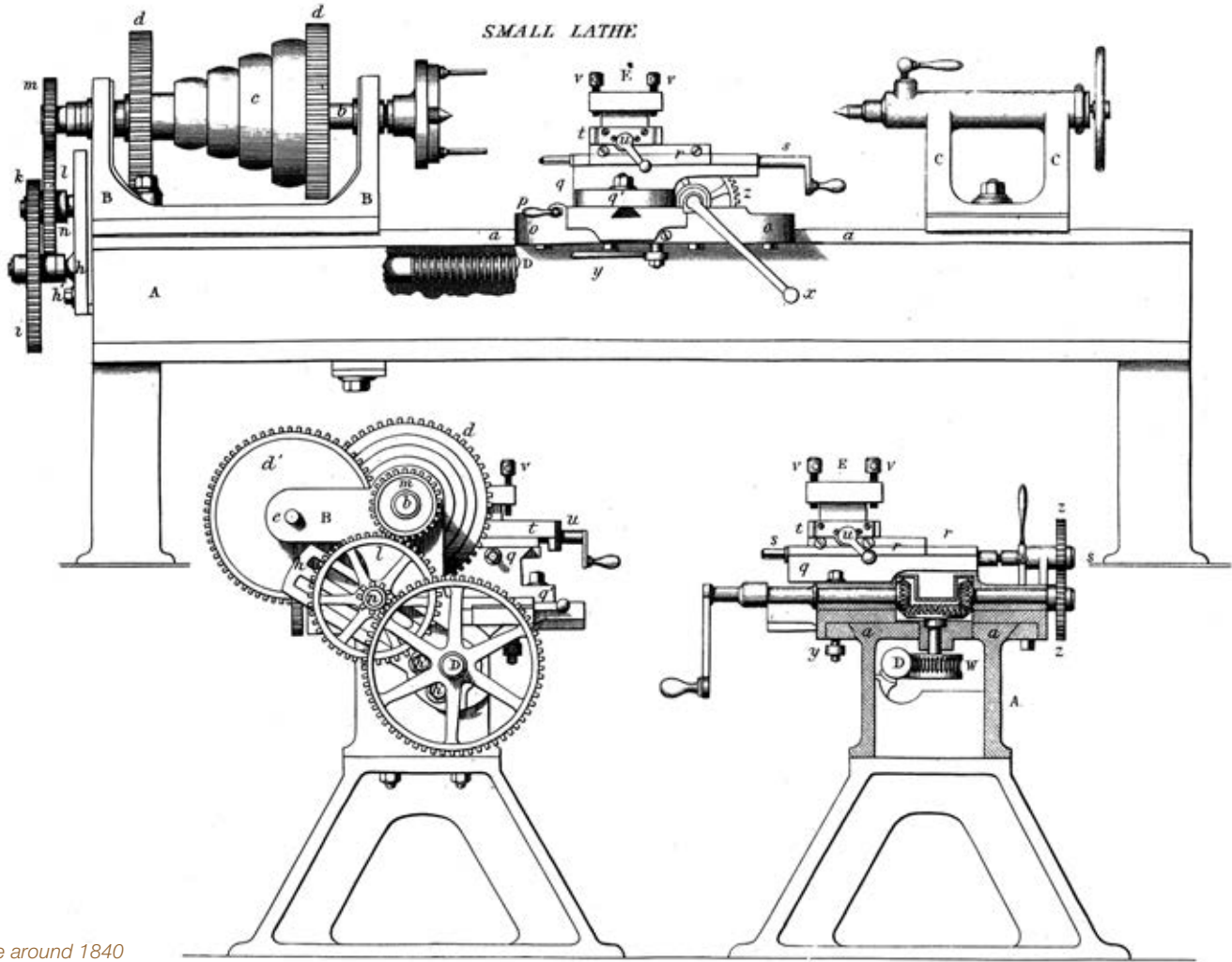
“As soon as possible, we will also offer you lower prices; we prefer not to follow our competitors, because we know too well that they can only get their factory sales by pushing down the prices.”

The Funcke & Hueck screw factory in Hagen around 1875 – cooperation partner and competitor of ABC

Supplier of machine parts
Wire and machinery were the most important purchases to ensure the production of high-quality screws. ABC continued to purchase machine parts from, among others, the supplier who had been the company's development partner from the very beginning: Harkort's Mechanical Workshops, now Kamp & Cie. Machine orders were very important and were therefore discussed in person.

Commissioning of a flywheel
For example, Daniel Altenloh had traveled to Wetter in 1838 to commission a flywheel. The exact dimensions required and a model were later supplied in writing so that two copies could be cast. When the order was placed, it was requested that the casting be “*put to work for us without delay.*” ABC was “*in a hurry*” and also asked for exact scheduling so that the company would “*only have to commission the waggoner once.*”¹⁵

Lathe around 1840



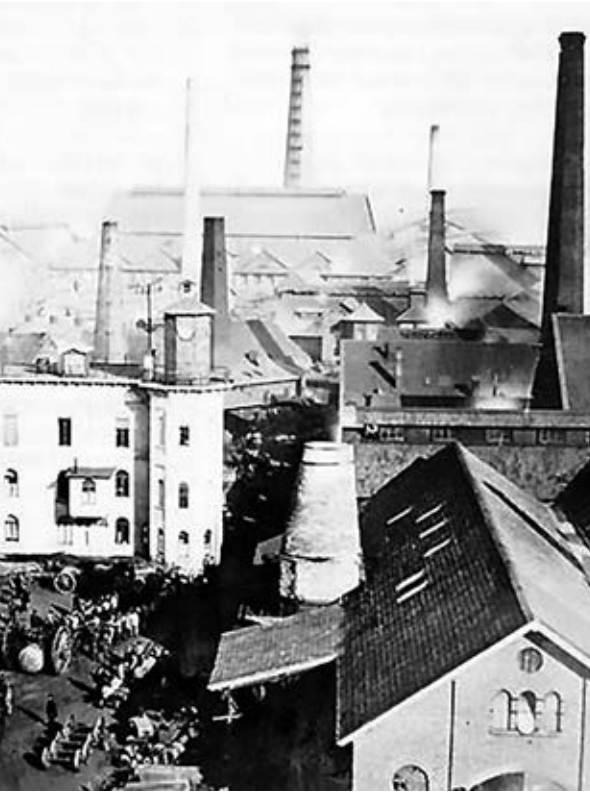
Search for optimal machines
In the late 1840s, ABC continued to search for the best machines for manufacturing. Much of the work was still done by hand, and every improved machine brought advantages. The machine manufacturer Quirin & Armbruster in Miesenheim, 125 kilometers to the south, seemed promising. The letter to him reads:

“We are very glad to accept your kind offer to supply us with a machine for the manufacture of wooden screw pins, as you have described it, since we cannot deny that such a machine, if it does [...] what you promise, will be of considerable advantage to us in comparison with the present course of production. [...] and that one of our partners would come there to agree with you on this.”

Wire suppliers
One of the long-standing wire suppliers was the Wälzholz company of Altena, founded in 1829. In 1838, however, broken threads led to complaints. ABC became clear, “*They otherwise drive us to order wire from other mills.*” A long-time supplier of cast steel was the Krupp cast steel factory in Essen, founded in 1811.

Quality of supplier products
In search of good quality material, ABC later also turned to Lehrkind, Falkenroth & Cie in Hagen-Haspe and ordered 650 pounds of round iron in various thicknesses. However, ABC emphasized, “*This order is only a sample and we would order more if the iron was of quality to suit the purpose for which we intend to use it.*” As for quality, the round iron was expected to be “*entirely round*” and “*without fractures,*” otherwise “*too many scraps would occur in processing when cutting the thread of the wood screws.*”

Krupp works in Essen in 1864 – a long-time supplier of iron wire for ABC



Transition to industrial enterprise

Since the beginning of the “*Compagnie*,” as companies were called in those days, the number of employees at ABC had grown considerably. While in 1823, the year of its foundation, the company had the usual size of a small business with three employees, it soon grew to 70 employees in 1838 and 100 employees in 1844. Small companies also “*manufactured*” screws, often calling themselves “*manufacturer*.” However, only a few of them managed to transform themselves into industrial enterprises through the increasing use of machinery, constant reinvestment of capital, production based on the division of labor, and private entrepreneurs with a market orientation.



Ennepetal-Milspe station around 1894

The railroad was a crucial engine of industrialization. The railroad from Wuppertal-Elberfeld to Dortmund ran through Ennepetal-Milspe, where a railway station was built in 1849. The ABC site is only 400 meters away (bottom left in the picture).

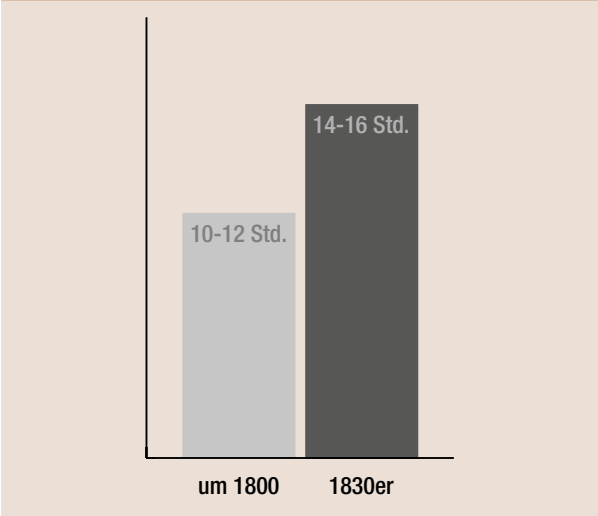
Emergence of factory work

This completely different mode of production also changed the nature of work. It gradually became disciplined and specialized wage labor. People were slow to adapt to the discipline, intensity, and rigid schedules required. The transition from commercial to industrial work methods had to be negotiated politically and socially in the following decades.

Young workforce

The majority of workers in primarily machine-based companies were young, and this is evident at ABC as well. In 1839, of the 80 to 90 workers at ABC, only 6 were adults. Most of the workers, according to the company, were, “*boys and girls little people from 12 - 16 years*.” Like the textile industry, the wood screw industry relied on children under the age of 16 for much of the 19th century.

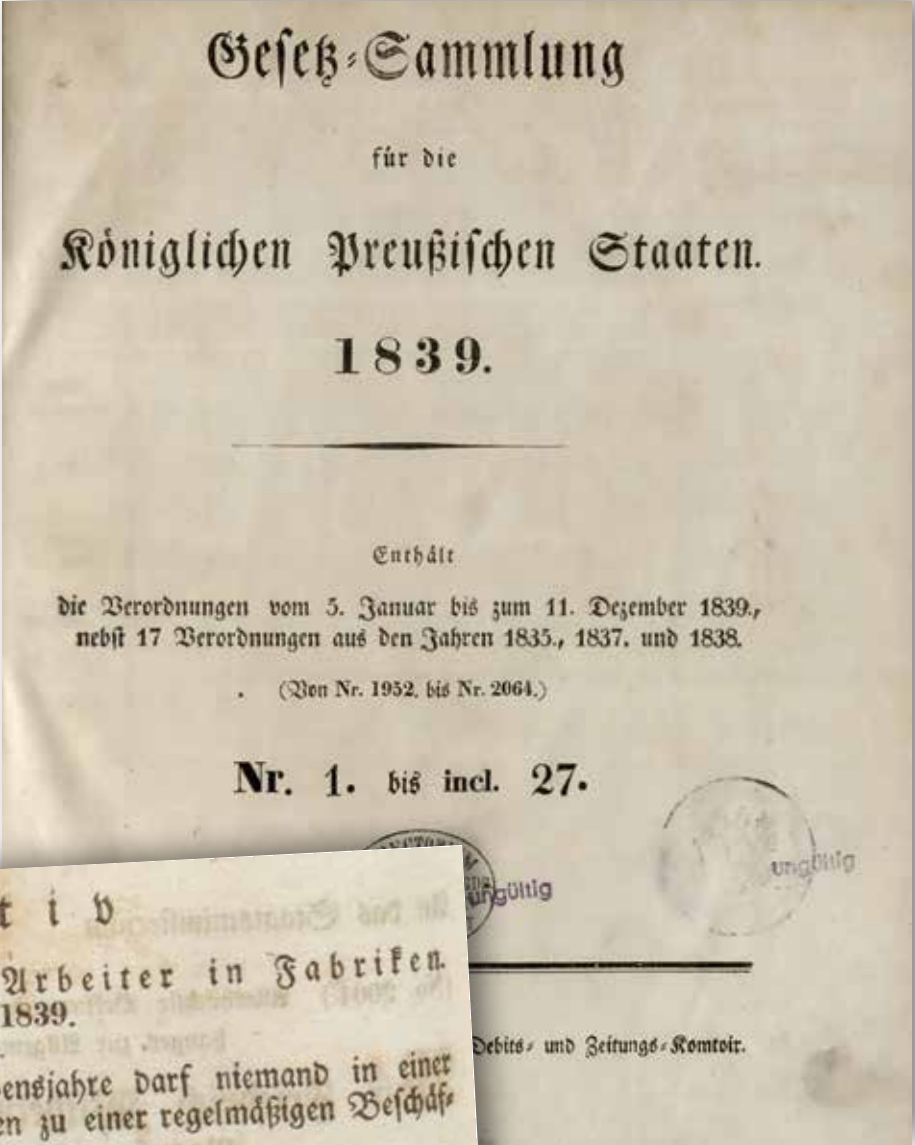
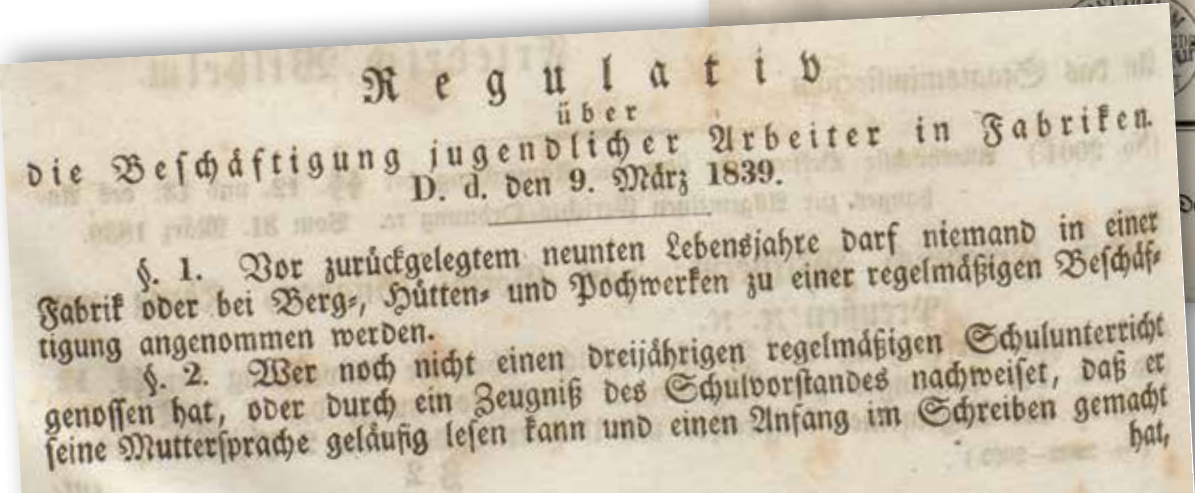
Increase in daily working time by 30-40% during the early industrialization in Germany around 1800 1830s



Child labor was not new

In pre-modern societies, the daily use of child labor was normal. With the onset of industrialization, child labor remained indispensable beyond the upper classes. One case at ABC shows how precarious the situation often was for some families. The Gevelsberg welfare office had sent two children to work for the company, and they still had to work off an advance. The case ended up in the Schwelm District Court, but garnishment of wages was not possible, as ABC informed the court:

“The children of the widow Hahne were sent to me as very poor people by the „administration for the poor“ in Gevelsberg. The wages of these two children are so low that they are [...] still working off the advance and cannot even wait from one payment day to the next. So if I were to maintain my demands and those of the shoemaker Mathai, these children would be forced to look for other work if they wanted to eat.”



Collection of Laws for the Royal Prussian States 1839

Child workers and adults of a factory in Iserlohn in 1872 – the composition of the workforce at ABC may have looked similar.



Prussia: Restriction of child labor

Whether as a servant, maid, or apprentice, since the Middle Ages Western European societies had developed a period of service between childhood and adulthood during which people left home to learn new skills and become independent. But factory work was exhausting, often resulted in permanent physical damage, and learning usually fell by the wayside. This, in turn, affected their later ability to serve in the military and to work. Despite opposition from parents and employers, criticism grew, and on March 9, 1839, Prussia passed a law restricting child labor. With only 7% of adults in the workforce, this affected ABC as well.

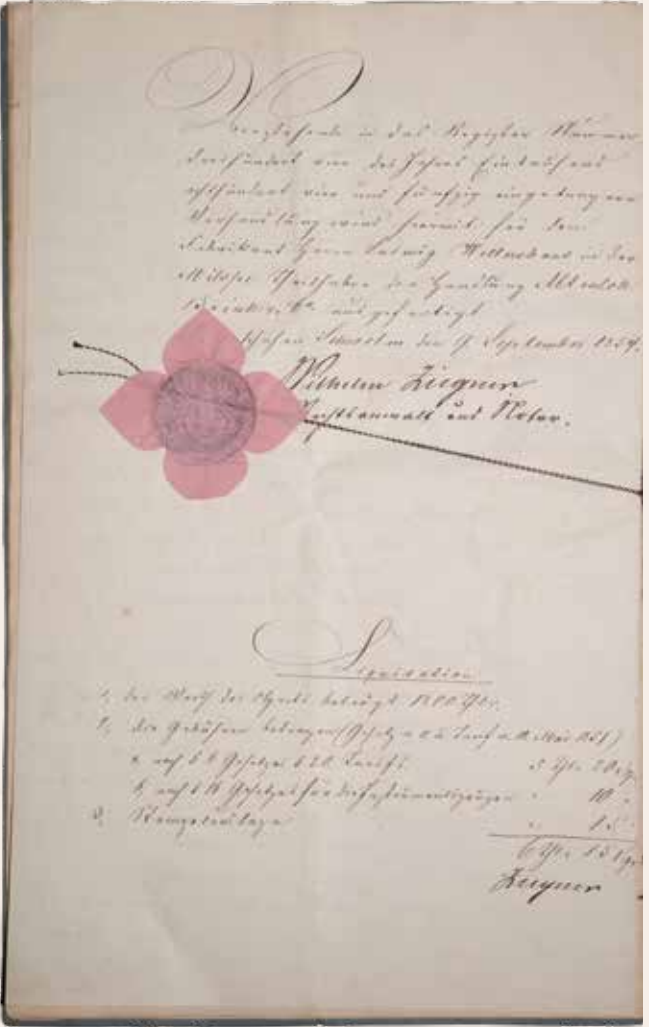
Compulsory education for teenagers

Factory work was prohibited up to the age of 9. Young people under the age of 16 could not work more than 10 hours, nor could they work at night, on Sundays or holidays, or if they could not prove that they had completed three years of schooling. The only exceptions were factories that provided training for their young workers. For ABC, there was an urgent need for action. They wanted to get the young people to attend the local night school regularly. Otherwise, they risked losing many workers and having to pay heavy fines, as Daniel Altenloh wrote to his "Compagnon" Riecke on October 4, 1839:

“By doing so, we would have to lay off half of our workers without having the opportunity to hire others who have the proper knowledge. It will be extremely necessary to hold a meeting soon to discuss the matters at hand. Otherwise, we could easily end up paying significant fines. For each dependent child there is a fine of 5 Thalers and we have 30-40 of them.”

Notarized contract for Carl Lienkämper

The case of Carl Lienkämper shows how close and trusting a relationship with a company and employer can be in individual cases. He had started as a factory worker at ABC in 1825, probably at a very young age, and had become a master craftsman. He must have become so indispensable to the company that a long-term employment contract was signed with him in 1848. The contract was notarized and renewed a year before it expired. In this case, an important, deserving, and trustworthy employee was to be retained at all costs. This was unusual for normal factory workers and provided a high degree of security and commitment. In addition, the contract represented an extraordinary recognition of his person, his skills, and his importance to the company.



Succeeding employment contract with Carl Lienkämper from 1854

First ABC employment contract with Carl Lienkämper from 1843

- “1. the factory owner Mr. Daniel Altenloh on behalf of the Altenloh, Brinck & Comp. business in Milspe, and
- 2. the factory worker Carl Lienkaemper residing in Ebbinghausen.”

“§1. The factory worker Carl Lienkaemper hereby hires himself out for twelve years, beginning on the first of May this year and ending on the first of May eighteen-hundred and fifty-five, to perform with loyalty and diligence in the wood screw factory of Altenloh, Brinck & Comp. all factory work that occurs and is assigned to him, and undertakes not to divulge the slightest secret about the factory.

§2. On the other hand, Mr. Daniel Altenloh, on behalf of the company Altenloh, Brinck & Comp. in Milspe, undertakes to pay the factory worker Carl Lienkaemper two hundred /: 200:/ Thalers of Prussian Currency per year.”²⁴



Widow's clothing at the beginning of the 19th century

Widows and wives of industrialists were usually well educated in the 19th century and took advantage of their opportunities. Mourning clothes were also used deliberately – as an expression of widowhood and a demand for social respect. The dyeing of black mourning clothes was elaborate and expensive at the time, and was therefore reserved for the middle classes.

1839: Widow Wellershaus becomes active

In 1826, Christoph Wellershaus was the first of the five founders to die. However, it was not until 1839 that his widow became active in the matter of succession. This did not go smoothly, as the succession raised questions about the handling of the succession and internal transparency. The widow, now 50 years old, wanted to pass on her inheritance to her son, Johann Ludwig. At the time of his father's death, Johann Ludwig was only 12 years old, and thus unable to enter the business. However, he was now 25 years old, which is probably why the widow wanted to get an overview and have the books presented to her.

Riecke's concerns

The co-founder Riecke, however, was reluctant to give the widow access to the books and to accept the son as successor. She prevailed, however, as the letter – probably from Brinck, who apparently kept the books at the time – makes clear:

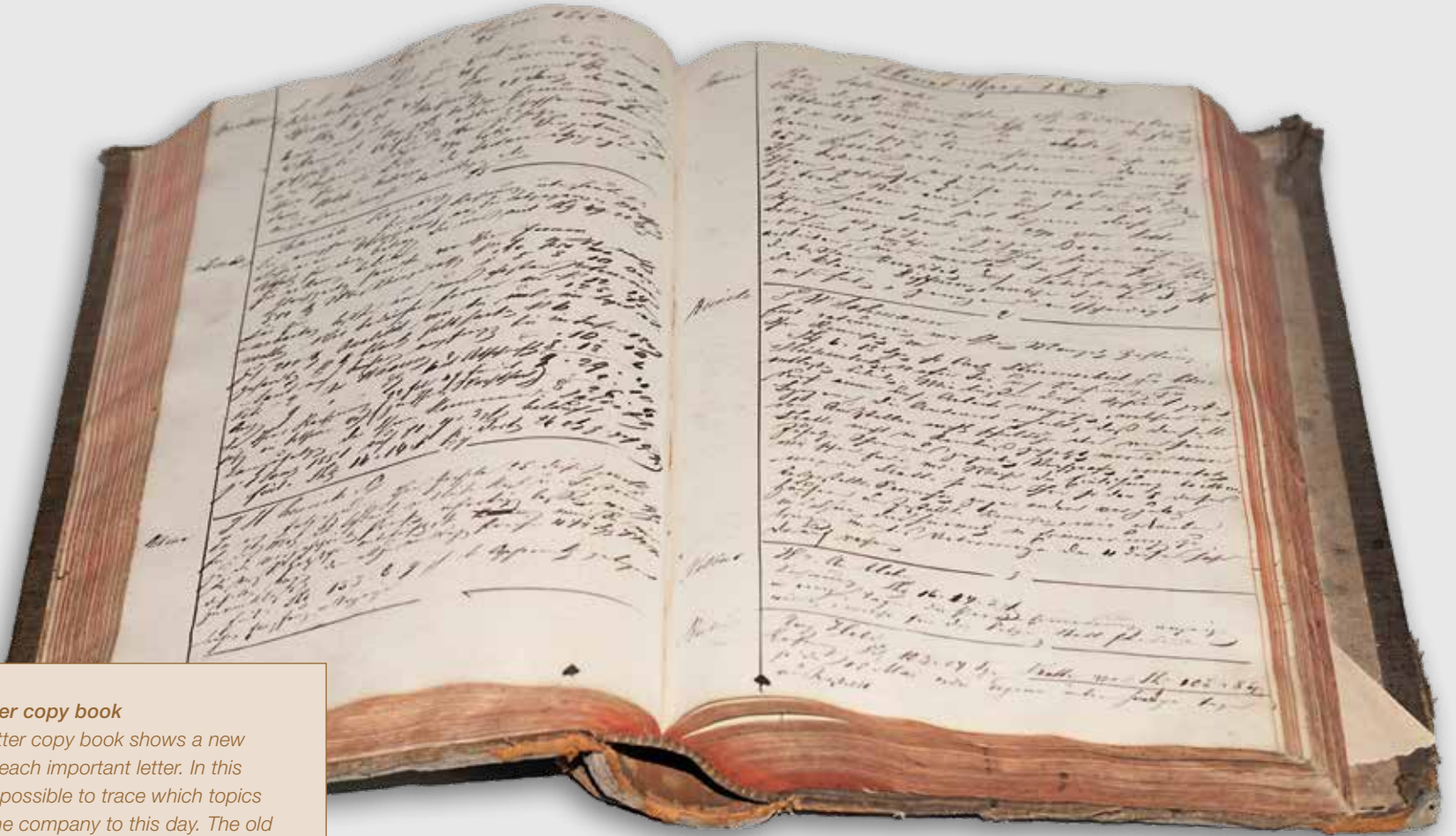
“If Mrs. Wellershaus wants to settle with her children and transfer the share in the factory to Ludw[ig] W[ellershaus], she has not yet demanded the least of our factory affairs yet. It doesn't matter to us in which way these are settled, but just as it was the same to us in which way you Mr. F.A.R. [Franz Arnold Riecke] [...] to your cousin Carl [...], whether this is done in a sweeping manner or not. You will have made up a draft, for which Mrs. Wellershaus is also free to [inspect] these books.”²⁵

Transparency and clarification of succession required

It is clear from the correspondence that from time to time Riecke made his own interest calculations, possibly without consultation. Riecke's resistance may have had something to do with this. The correspondence also raises the question of whether the existing Articles of Association of 1823 were sufficient or needed to be expanded. The widow's inquiries and insistence provided the initial impetus to review and revise the contractual basis of Altenloh, Brinck & Compagnie, as was done in 1858. The efforts of the widow Wellershaus thus advanced an important process for the company that secured its future existence. She also brought Johann Ludwig Wellershaus into the management of the company, who for many years helped to determine the fate of the company.

Death of Theodor Altenloh and Johann Wilhelm Brinck

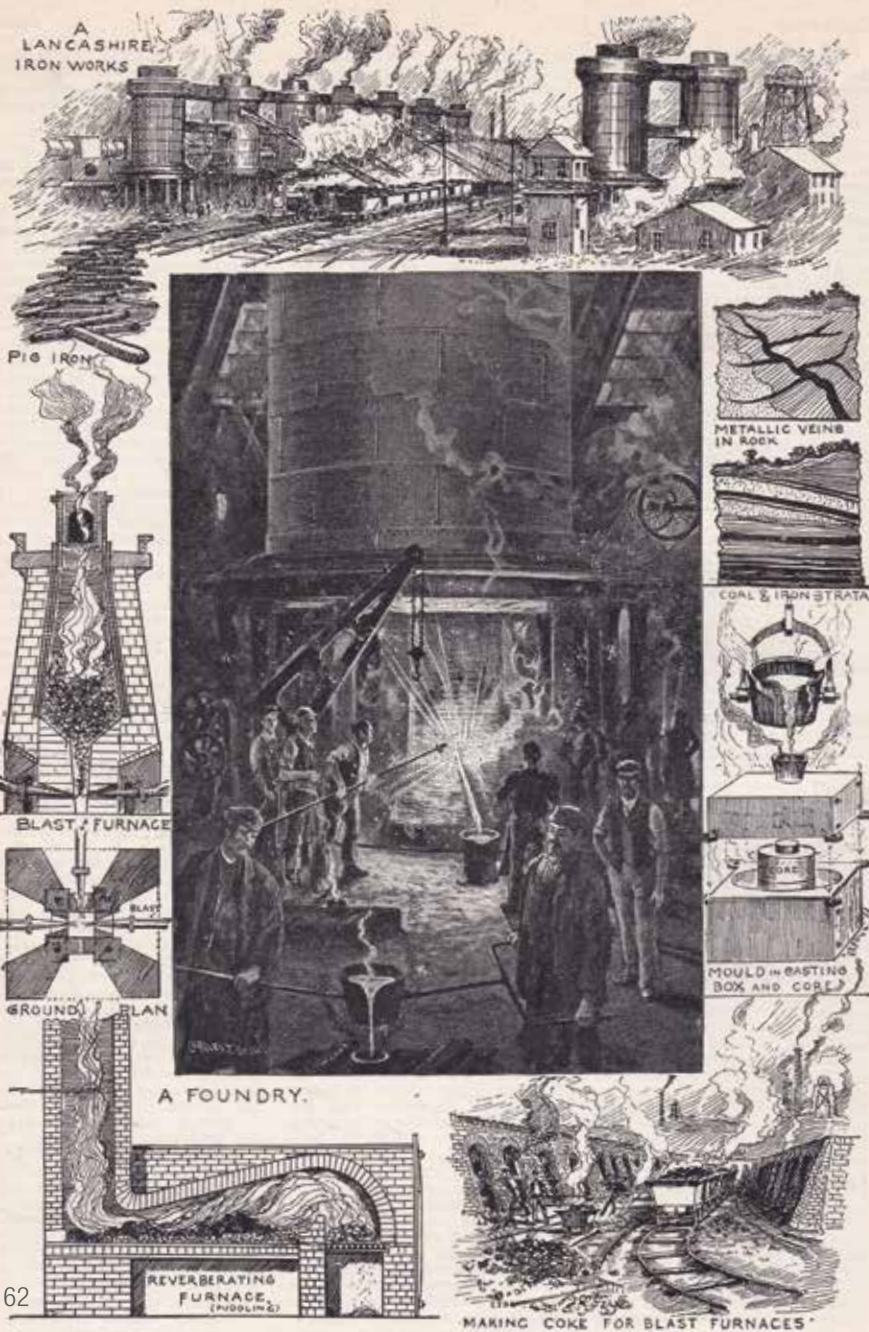
Theodor Altenloh died in 1840 at the age of 60. His widow and her two sons Carl Theodor (1811-1856) and Wilhelm (1815-1891) succeeded him. In 1853, she granted Wilhelm a general power of attorney to represent her interests among the partners. The fourth founder, Wilhelm Brinck, was 69 years old when he died in 1843. His heirs were his widow, his two daughters Henriette and Franziska, and his son Johann Wilhelm (1809-1869). Of the founders, only Daniel Altenloh locally and Franz Arnold Riecke from Remscheid now determined the continuation of the business.



ABC letter copy book

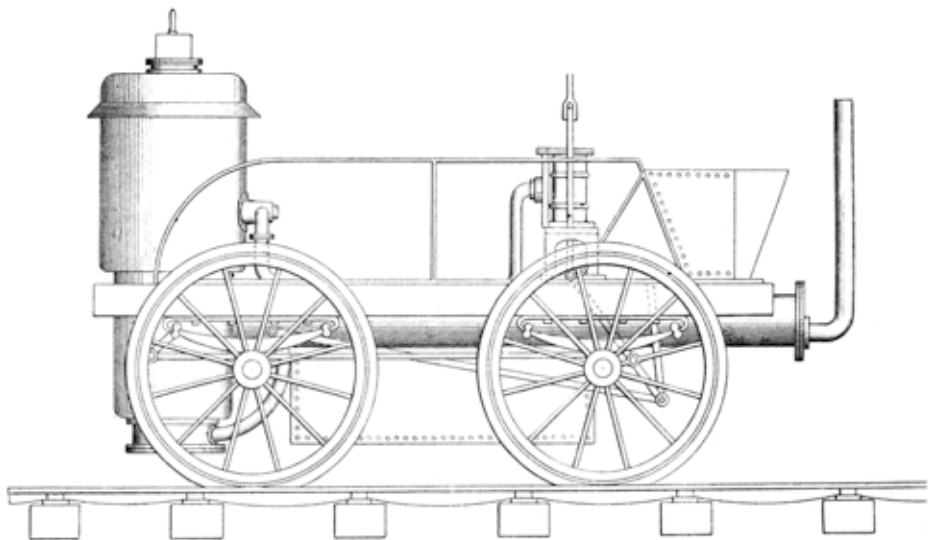
ABC's letter copy book shows a new entry for each important letter. In this way, it is possible to trace which topics moved the company to this day. The old handwriting must be transcribed to be able to read the contents.

1851 - 1879:
Preserving the company



Iron was a key material of industrialization. Pig iron is produced from ore and can then be processed into steel.

The first German railroad was built in 1835, and by the mid-1840s railroad construction had become a leading sector of German industrialization: 20 to 30% of total economic investment went into this area.



Even before the creation of the German Empire as a nationstate in 1871, the German Customs Union (Deutscher Zollverein), an association of German states, had been established in 1834 to facilitate customs and trade policies. For the first time, the economy was given a higher priority than the territorial state. The result was greater national integration and unification. From the 1850s, German industrialization experienced a period of acceleration and breakthrough, often referred to as the Industrial Revolution. Industry became independent and reached new levels of economic development. Progressive euphoria and a belief in the triumph of a new, better world through industry and technology followed. The 1870s saw the beginning of the phase of high industrialization and the development of an industrial state.

Modern economic & social system emerges

The process of industrial acceleration was the basis on which the modern economic and social system unfolded. The market and its laws increasingly became the regulators of production. Feedbacks and interactions created dynamic economic growth and opened people's eyes beyond their own borders, “*The world is a whole. Industry and trade have made it so.*” said the Chamber of Commerce in Wuppertal-Elberfeld in 1857.¹

Machine power as a success factor

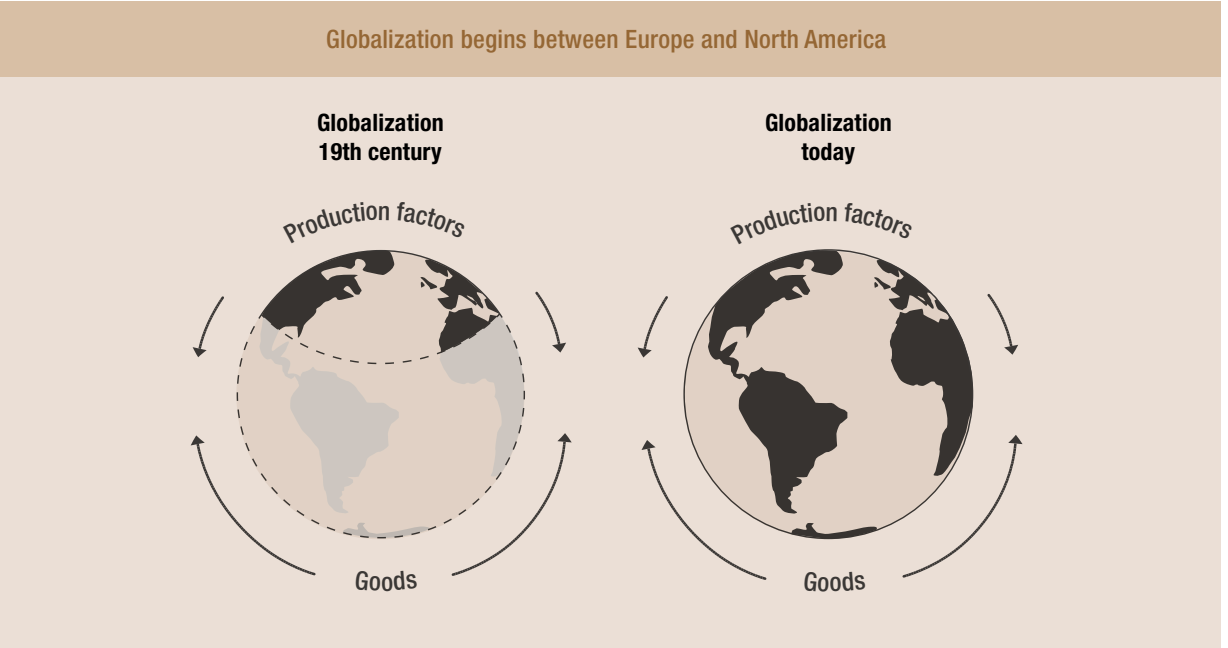
Large-scale commercial and industrial production increasingly moved away from earlier sources of power such as hydro, animal, or human power. Wherever economically viable, they were replaced by steam power, which provided the energy to drive machinery. The years 1854 and 1857 were true boom years in which mechanical engineering became an important leading sector of German industrialization. Many foreign competitors were driven out of the domestic market. The German economy as a whole experienced a significant upswing, which was interrupted only by brief crises and led to a long-term increase in the national product.

Modern economic bourgeoisie

In this development process, the economic bourgeoisie became a new bourgeois leadership and management milieu with its own industrial goals. They drew on their experience of the market economy and created a meritocratic work ethic. Economically established families moved in their own marriage and educational circles. All in all, the foundations for capital and personal wealth were consolidated. Nevertheless, a number of entrepreneurs, such as ABC's early business partner Friedrich Harkort (1793-1880), worked to improve the situation of the less well-off.

Challenges for ABC

During the economic boom in the railroad, engineering, coal mining, and iron and steel industries, ABC also faced significant challenges. The company had developed well, grown steadily and modernized. The task now was to continue on this path and benefit from the dynamic economic development – and to do so in the face of increasing competition in its own market environment. In addition, the company was faced with the task of managing a generational change.



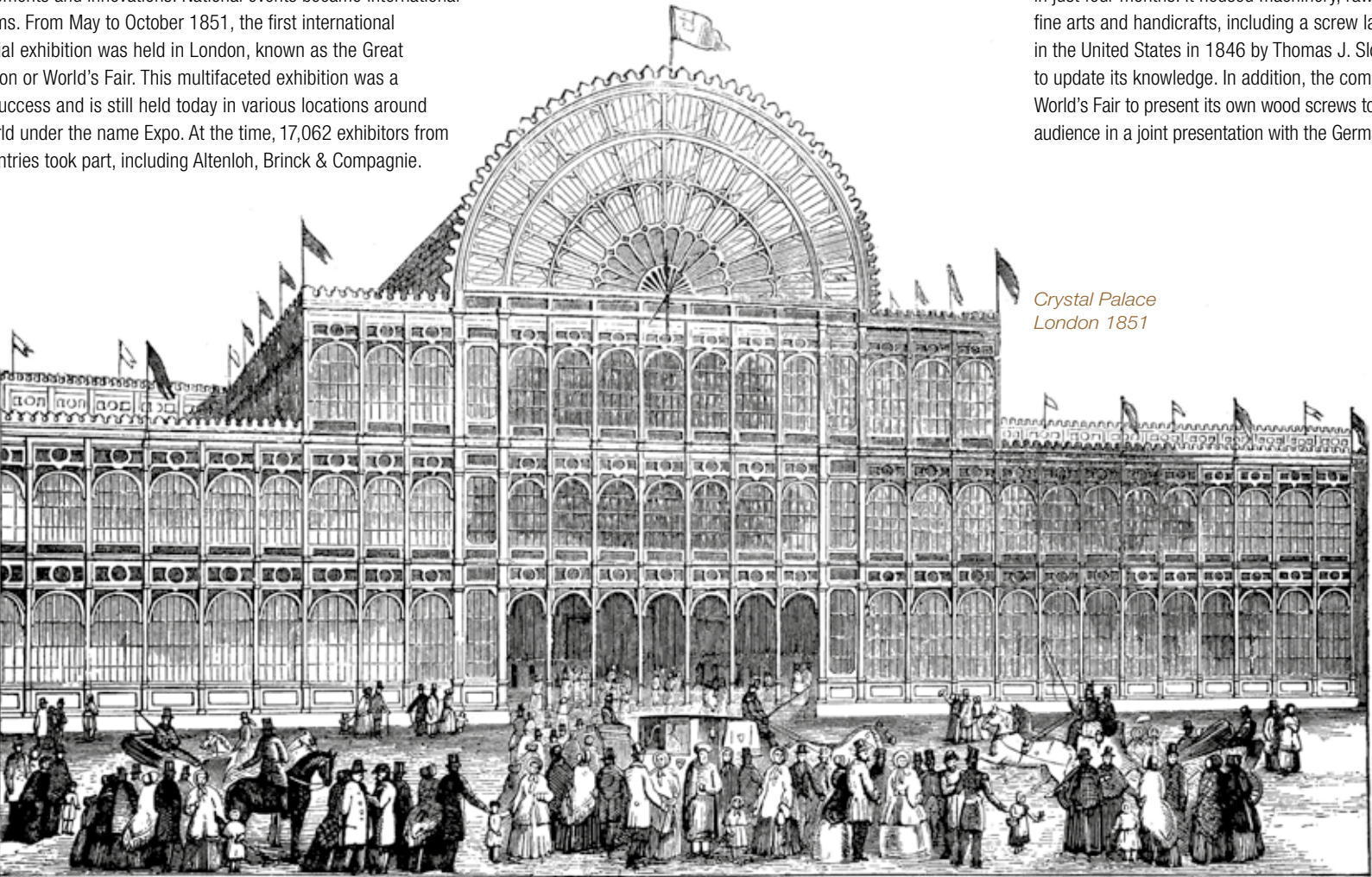
First World’s Fair in 1851

As industrialization spread to more and more regions, industrial expositions were the place to showcase one’s capabilities and achievements. It was also a place to learn about the latest developments and innovations. National events became international platforms. From May to October 1851, the first international industrial exhibition was held in London, known as the Great Exhibition or World’s Fair. This multifaceted exhibition was a great success and is still held today in various locations around the world under the name Expo. At the time, 17,062 exhibitors from 28 countries took part, including Altenloh, Brinck & Compagnie.

Exhibition of industry, craft & art

The exhibition building, the Crystal Palace in London, was an engineering sensation in its own right. The innovative 76,000-square-foot glass, metal, and wood structure was completed in just four months. It housed machinery, raw materials, inventions, fine arts and handicrafts, including a screw lathe machine patented in the United States in 1846 by Thomas J. Sloan. This allowed ABC to update its knowledge. In addition, the company used this first World’s Fair to present its own wood screws to an international audience in a joint presentation with the German Customs Association.

Crystal Palace
London 1851



1855: ABC as a solo exhibitor in Paris

The company also participated in the World’s Fairs in Paris in 1855 and Vienna in 1873, but this time as an individual exhibitor.² However, this was not so easy. The Arnsberg District Commission was responsible for organizing the participation of regional exhibitors. But ABC was already represented locally by the Paris branch of co-founder Riecke, the trading company Johann Eberhard Riecke & Söhne. So ABC emphasized that it could organize its own appearance and present the screws independently. The company was convinced of the quality of its own products and was confident in this respect:

“We consider it our duty to draw the attention of your honorable Commission to our product. During our presence in Paris, we did not find a screw card from the German exhibitors that was of equal quality to ours.”³

The subsequent report on the exhibition by the Prussian Ministry of Trade in Berlin confirmed this self-assessment.

“Some Prussian companies distinguished themselves in rough forging work, of which we have to mention Funcke and Hueck in Hagen and Benninghaus in Thale am Harz. [...] Among the wooden screws exhibited, those of Altenloh, Brink and Comp. in Hagen stand out.”⁴

Palais de l’Industrie
Paris 1855



1873: World's Fair in Vienna

ABC did not take part in every World's Fair, but was there again in Vienna in 1873. In the official catalog of German exhibitors, the Arnsberg district government presented where in Westphalia the “*main seats of manufacture of small iron and steel goods, cutlery, tools and factory locks etc.*” were located, namely in “*Altena, Hagen, Iserlohn, [Ennepetal-]Vörde.*”⁵ Numerous manufacturers from the Ennepetal-Milspe area presented themselves together, but ABC was again represented as an individual exhibitor. ABC itself described its range of services as “*Fabrication of iron and brass wood screws, iron threaded screws and carriage bolts, mainly for the German market.*”⁶ The company equipment was also shown: three steam engines of 90 hp and a workforce of 197 workers.

Medals as honorary and merit awards

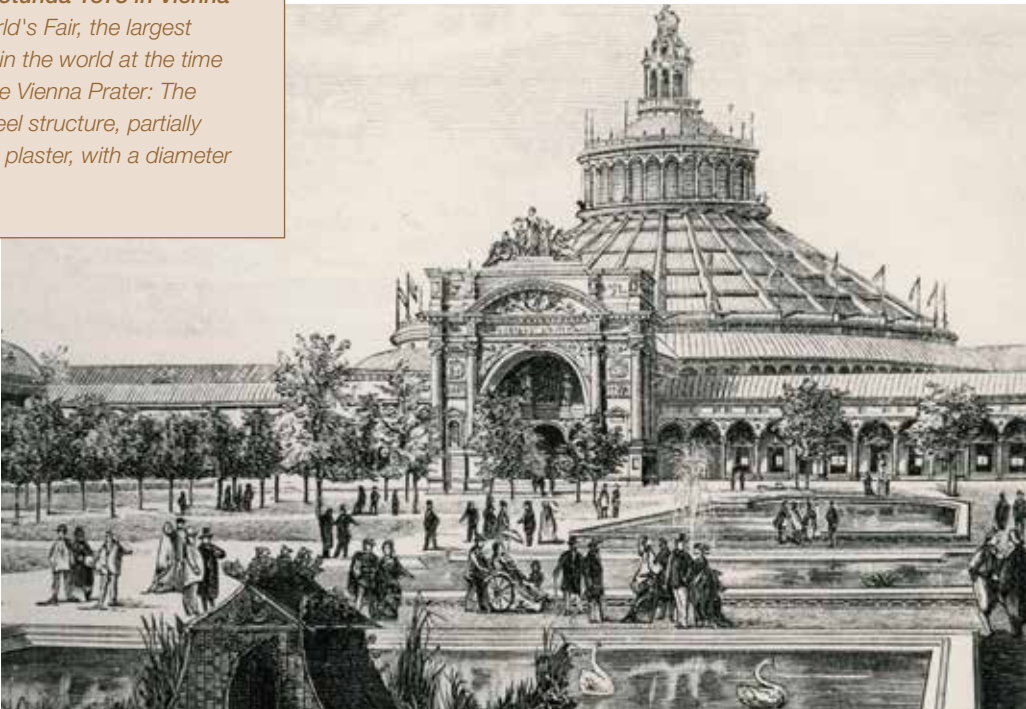
By participating in a World's Fair, companies presented themselves as high achievers and agents of progress. An important form of recognition were the medals that were given to participating companies as honorary and merit awards. They took the form of coins, but unlike money, they were not intended to be used for payment. A large number of medals were awarded at the World's Fairs, and companies proudly used them in their corporate communications.

ABC medals in 1851, 1855 and 1873

ABC also received such medals and used them for advertising purposes. An ABC letterhead shows an idealized view of the company's premises, along with the medals the company had won at the World's Fairs. The company received such an award at its

first participation in 1851. In 1855, the company received another bronze medal as a manufacturer of wood screws - with a portrait of Napoleon III, a diameter of 59 mm and a weight of about 100 g. The exhibition directory shows which other manufacturers were also awarded, including the rival factory Funcke & Hueck from Hagen. Later, disputes arose between the two companies over the use of the medals. In 1873, ABC received one of about 3,000 progress medals. It shows the laurel-wreathed head of Franz Joseph I, Emperor of Austria and King of Bohemia.

Dome building rotunda 1873 in Vienna
For the 1873 World's Fair, the largest domed structure in the world at the time was erected in the Vienna Prater: The rotunda was a steel structure, partially clad in wood and plaster, with a diameter of 108 meters.

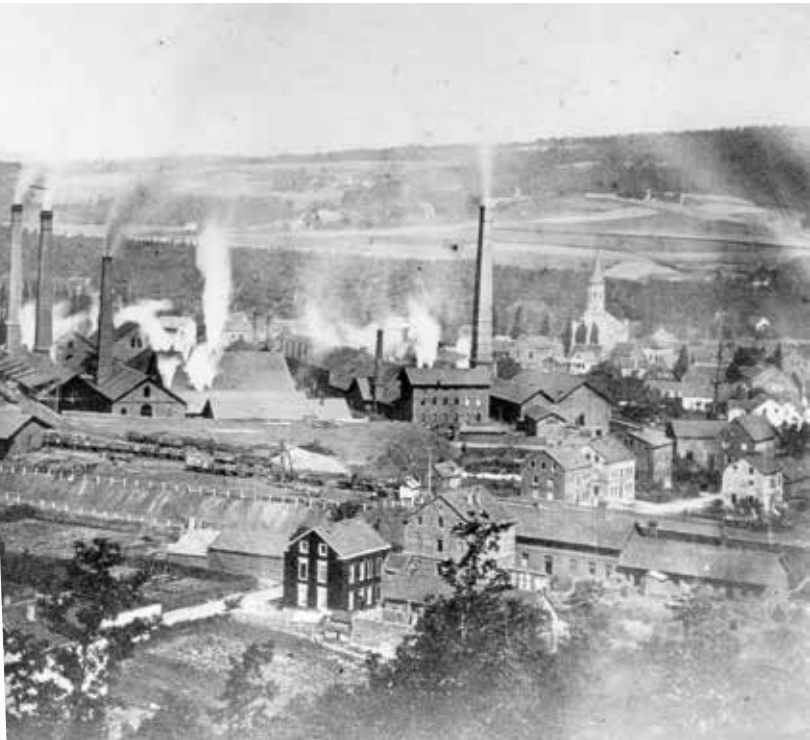
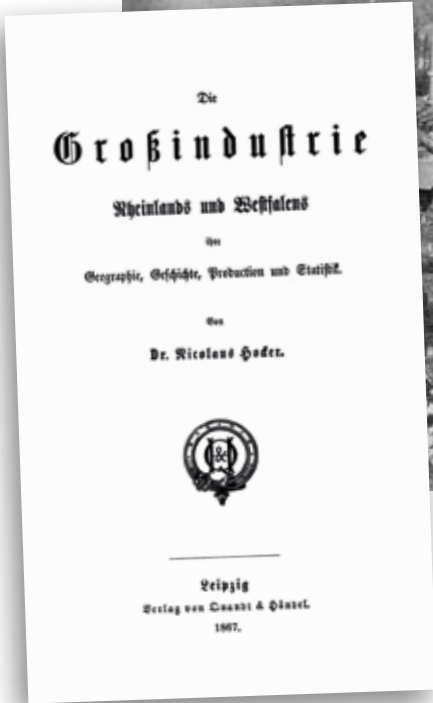


Market communication in the middle of the 19th century

Participation in a world exhibition or winning a medal was extremely valuable for advertising purposes. The most important media for advertising communication were catalogs or related literature. For example, the trade statistics of the Prussian government advisor Ludwig Jacobi from 1857 report on ABC.⁷ The 1866 Directory of Commerce and Industry in Northern Germany also lists the Altenloh, Brink & Co. wood screw factory in Milspe.⁸



Certificate of award of the Progress Medal to ABC at the Vienna World's Fair 1873



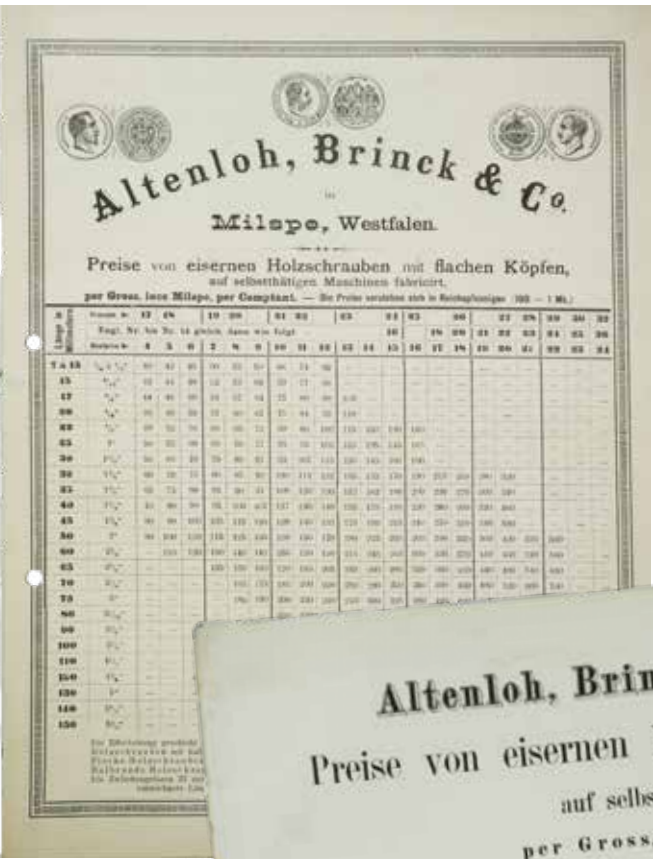
Iron and steel works Falkenroth, Kocher & Co.
in Hagen-Haspe around 1875

Title page of the economic overview work
“The large-scale industry of the Rhineland and Westphalia”
by Nikolaus Hocker, 1867

1867: A-B-C screws as trademark

The economic overview work “*Die Grossindustrie des Rheinlandes und Westfalens*” [*The large industry of the Rhine Land and Westphalia*] by the editor and economic author Nikolaus Hocker from 1867 not only certifies the company to be the oldest wood screw factory in Germany. In addition, the abbreviation “ABC” is used for the first time for the products of Altenloh, Brinck & Compagnie, which from then on increasingly becomes the abbreviation for products of this manufacturer. Exactly 100 years before Altenloh, Brinck & Co patented the SPAX brand in 1967, the brand name “*A-B-C screws*” is found here:

“*The village of Milspe, between Haspe and Schwelm, is no less the seat of an important wood screw manufacture; the firm of Altenloh, Brinck & Cie is the oldest wood screw factory in Germany. Their products are known as A-B-C screws.*”⁹



Price lists and sample cards

By the 1870s at the latest, specially designed and printed price lists were used to present the growing product range to customers at a glance. However, the most important and widely used product communication tool was still the sample card. Sample screws were attached to a card that clearly showed the existing product range. This allowed customers to see for themselves the features, quality and condition of the product. The sample cards were not only coveted in the first decades of ABC's existence and had to be returned – if they were not returned, ABC would immediately charge for the product samples provided. Screws were and still are a valuable commodity for ABC, and they had to be used profitably. Sample cards and screws from this period have not survived.

Product range

The product line included primarily, but not exclusively, wood screws. An ABC brochure from about 1872 lists the following products,

“*Iron wood screws with flat heads, manufactured on self-operated machines,*”
“*Brass wood screws with flat heads, manufactured on self-operated machines,*”
“*Carriage and key bolts,*”
“*Iron thread screws.*”¹¹

To differentiate itself from the competition, the company advertised in an address book for merchants in 1876 that it was the oldest wood screw factory in Germany. This entry also shows that the company's product line and customer base had expanded beyond wood screws. For example, metal screws were offered to manufacturers of sewing machines and telegraphs:

“*Screw f[actory]: Altenloh, Brinck & Co, iron and brass wood screws. Metal screws for sewing machines and telegraph construction. Oldest factory of wood screws in Germany.*”¹²

Cooperation with other manufacturers

During this time, ABC usually had a cooperative relationship with other screw manufacturers, helping each other out in case of shortages. This was the case, for example, with the other major manufacturer in the area, Funcke & Hueck in Hagen (1844-1990). A letter from 1853 shows that ABC supplied the company as follows:

“In polite reply to your esteemed [letter] of the 18th of the month, we want to show you our willingness to serve you gladly, to grant a 2% discount against payment in cash for your order and ask for your prompt reply if this is acceptable to you. First of all, please let us know which and how many of each kind you still need, and we will gladly give them to you when we have them in stock.”¹³

Recognition of ABC as a pioneer

The market had long been large enough, the competition manageable, and ABC’s leading position recognized. This is shown by the trade statistics of 1857, in which the Prussian government councilor Ludwig Jacobi first criticizes the *“half-heartedness of the previous craft factory operation.”* He called for industrial production to produce high-quality and inexpensive goods, and then highlighted ABC’s role as an innovative pioneer in the production of wood screws:

“Thus, the production of wood screws has been transferred from the manufacture to the factory for quite some time. As early as 1823, the wood screw factory of Altenloh and Brink was founded in Milspe, rightly regarded at that time as an important event in the field of the blacksmith’s trade.”¹⁴

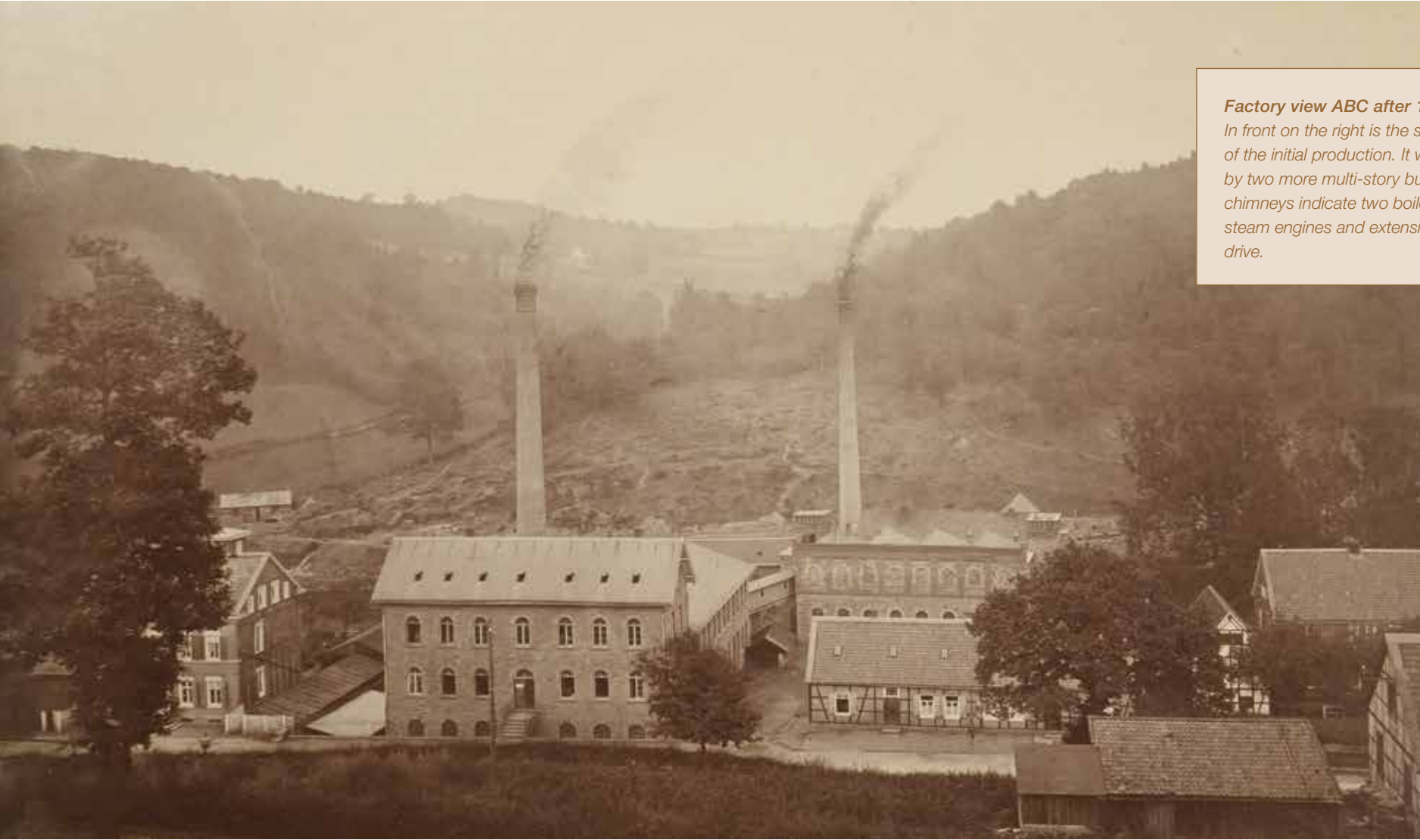
Growing competition

But Jacobi also made it clear that other factories were following ABC’s lead, pointing in particular to Funcke & Hueck in Hagen (1844-1990), a wire drawing company that also produced wood screws. He called this manufacturer to be *“the wood screw factory at the forefront of this line of business”¹⁵*, making clear how the noticeable competitive pressure was increasing.



Cartels: Protection against ruinous competition

As in many industries, this process of market maturation was met by the major suppliers coming together to form cooperative agreements and develop regulatory strategies. This was common practice during this period and for many decades to come. The government and much of the public viewed such regulatory efforts to protect industries from ruinous competition as entirely positive. Cartelization was not only common practice in the iron and steel industry; it remained a frequently chosen strategy for dealing with market dynamics in other industries as well.



Factory view ABC after 1875
In front on the right is the small building of the initial production. It was extended by two more multi-story buildings. The two chimneys indicate two boiler houses with steam engines and extensive machinery drive.

Assembly of screw manufacturers

On April 19, 1853, leading wood screw manufacturers met in Wuppertal-Elberfeld. In addition to ABC and Funcke & Hueck, the participants included Ulenberg & Co from Opladen, Schlieper & Söhne from Iserlohn-Grüne, and J. Tillmanns and Carl Bauer from Cronenberg. The manufacturers thus covered a radius of about 50 kilometers around ABC. In view of the English and French competition, price agreements were made. It was decided to draw up binding price lists, to publish discounts and to adhere to them in the future. Discounts on brass screws were to be eliminated completely, and the companies were open to further price increases. Internal disagreements were to be settled by a chairman.¹⁶

Agreements on prices and discounts

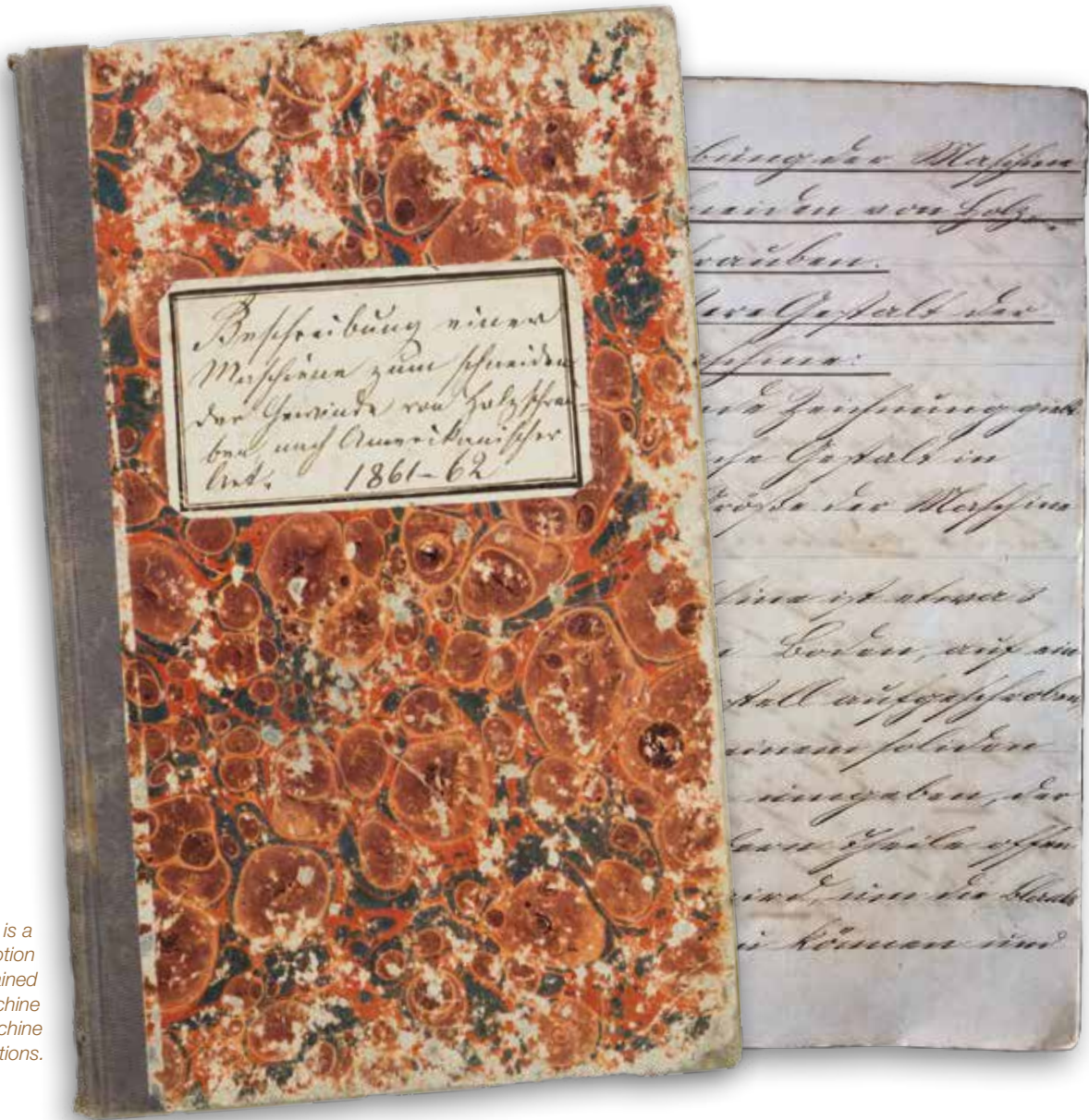
A year later, the group met again in Cologne. The French company Japy Frères of Beaucourt was also invited to make price adjustments for Germany and France and to agree on exceptions for sales to Belgium:

“The parties unanimously considered it necessary to amend the two old tariffs, as they were too high in some cases and too low in others, and no longer corresponded to the current manufacturing prices.”¹⁷

Cartel contractually secured

The group of manufacturers decided to include other companies, and in 1861 they signed a cooperation agreement that gave them an official form. A committee with an elected president was formed to settle disputes and infringements. In addition to ABC and Funcke & Hueck, five other companies signed the agreement: Falkenroth & Kleine, Isaac Tillmanns, Carl Bauer, Schlieper & Söhne, and Rath & Grave. In 1871, the screw factory Friedrich Boesner of Neuwied also joined. New discount rates and a ban on poaching workers were agreed upon.

The ABC machine book from 1861/62 is a handwritten copy of a technical description for a machine for thread cutting. It contained everything worth knowing about the machine and was a precursor to today's machine descriptions and operating instructions.



Confident in conflicts of interest

On the one hand, the competitors ABC and Funcke & Hueck cooperated closely and amicably on such competition issues. On the other hand, however, ABC was not afraid to step into the fray when it came to important conflicts of interest. In the 1860s, Funcke & Hueck had acquired and modified the American screw lathe that had been exhibited at the 1851 World's Fair. At that time, the company wanted to make use of the “first to file” principle, i.e., to protect the use of the invention and reserve it for itself – today’s “first to invent” principle did not apply until 1936, and modern patent law (1877) was not yet in place.

Machine use at ABC enforced

Funcke & Hueck applied for and received an exclusive license to use the new screw lathe machine. However, ABC wanted to use the same machine and would not accept this. So ABC objected and took legal action. ABC also wrote a letter of complaint to the Prussian Minister of State and Trade, Count Heinrich Friedrich August von Itzenplitz in Berlin. The appeal was successful, as the 1867 insurance policy also covered these “automatic machines.”¹⁸



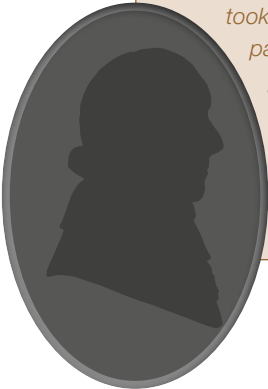
In the ABC insurance policy of 1867, the “self-operated machines” were insured for the first time. It shows that ABC prevailed over its competitor Funcke & Hueck in the conflict over the installation of these machines.

Death of Daniel Altenloh and transfer of business

The 1850s marked the beginning of a particularly challenging period in ABC's internal development. In 1851, Daniel Altenloh died, the last of the company's three technical pioneers. The 58-year-old was also the last of the founders to have extensive experience as a managing director in the field. He left behind a widow of the same age and two daughters, Emma and Elise, aged 24 and 22. His share was inherited by the widow and her daughters. The fifth co-founder, Riecke, was still alive and contributed accordingly, but the local business was taken over by the 37-year-old Wellershaus heir Ludwig.

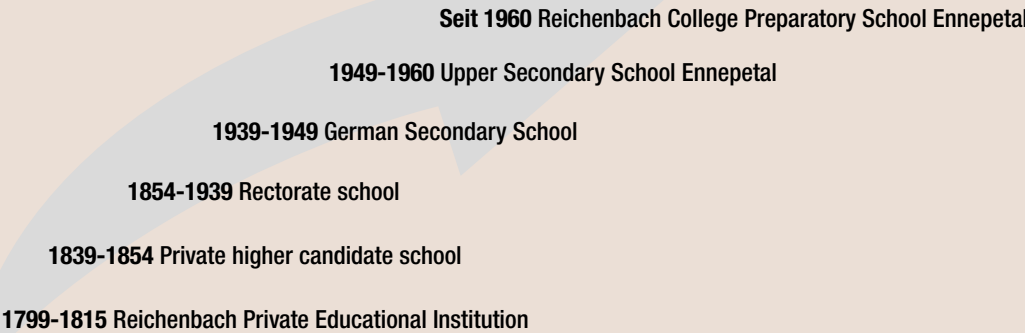
Well-prepared successor generation

The next generation of founders already had a very different knowledge base than their parents. As early as 1811, Theodor Altenloh and a number of other early entrepreneurs were involved in the board of directors of the “*Reichenbachsche Privatbildungs-anstalt*” [Reichenbach Private Educational Institution], which was founded in 1799 and is now the Reichenbach College Preparatory School in Ennepetal. In the 19th century, the private school provided higher general education and networking for the sons and later daughters of entrepreneurs. These included the children of the Brinck, Brand, Lohmann, Bilstein and Asbeck families, names that can be found in the network of relatives of the ABC founders and their descendants. The business knowledge that was so important at that time was passed on in the families.¹⁹



Johann Wilhelm Reichenbach (1753-1815)
At the age of 24, Johann Wilhelm Reichenbach took over the parish office of the evangelical parish in Voerde in 1777. In addition to pastoral care, he taught children. At the request of many parishioners, he founded the “Reichenbach's Private Educational Institution for boys at Voerde” in 1799.

From Reichenbach's private educational institution for future factory owners to today's college preparatory school



Family business: Existence and identity

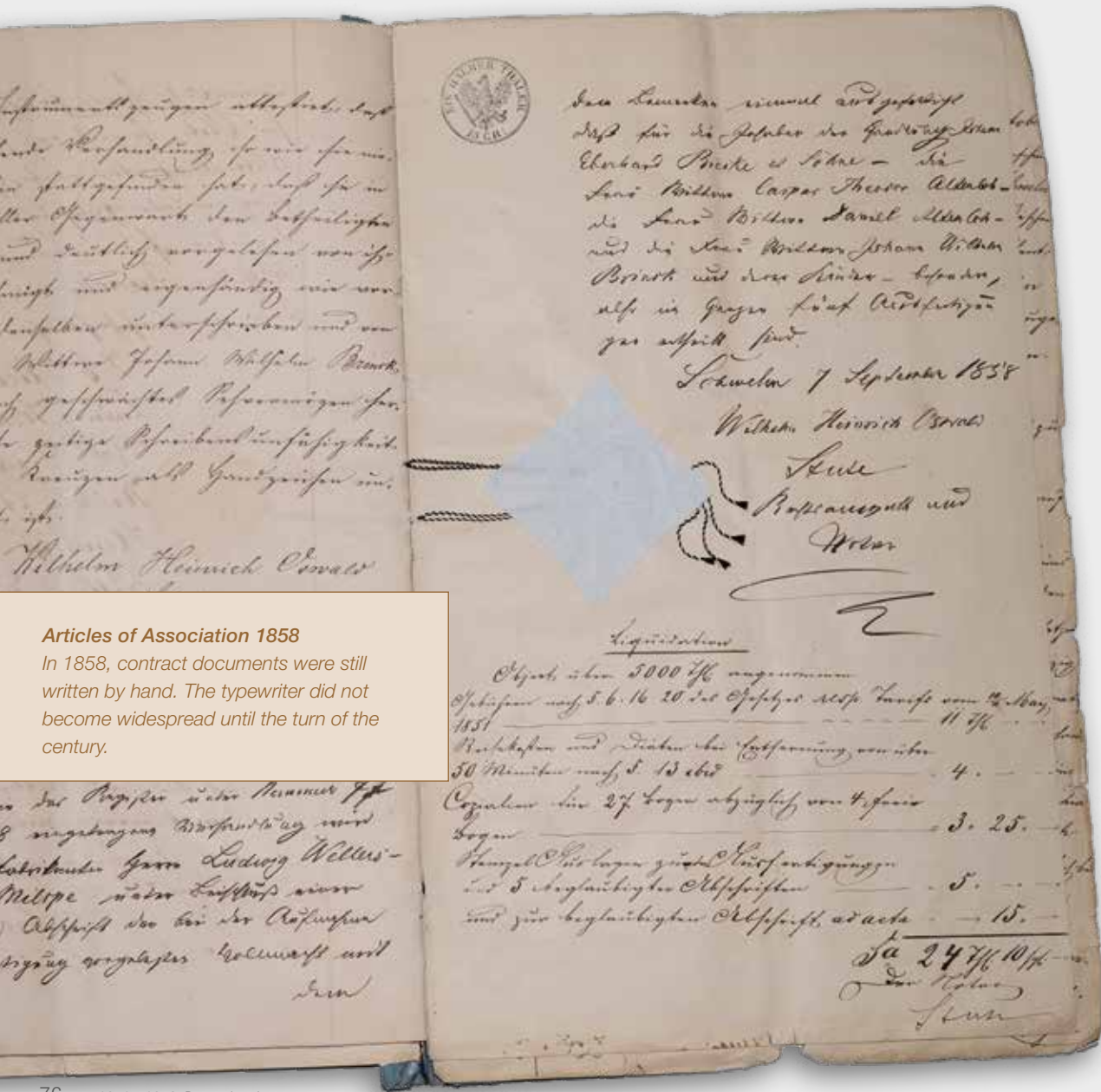
As in virtually all entrepreneurial families, the networks of family and business were inextricably intertwined and formed the center of the family's own livelihood and the anchor of its identity in economic citizenship and entrepreneurship. In this respect, the death of the founders marked an important decision for the future. As early as 1839, the widow Wellershaus had decided and successfully lobbied for the transfer of her share in the company to her son, who was to join the company and thus pass on the family business to the next generation.

Widows: Securing and preserving life's work

After the deaths of Theodor Altenloh in 1840, Wilhelm Brinck in 1843, and Daniel Altenloh in 1851, their three widows also committed themselves to providing for the next generation and securing the future of the company. The women had known each other for more than 30 years and had experienced their partners' lives and work. They acted with confidence and determination to preserve their life's work as a family business for their descendants. The widows of Johann Wilhelm Brinck and Daniel Altenloh had a particularly strong negotiating position because they owned shares in the factory.



Widows in the 19th century were subject to strict rules – whether mourning times or dress codes. When an entrepreneur died, his widow often played a decisive role in passing on the company to the generation of children who had not yet grown up. This was also the case at ABC.



1858: The new Articles of Association

As a result, the 1823 Articles of Association were renegotiated after 35 years. Heirs or descendants of all five founders and close relatives participated in the negotiations. In the end, a new, more detailed Articles of Association were adopted on Tuesday, September 7, 1858, in the “apartment of the innkeeper Theisen at Milspe.”²⁰

The new shareholders

According to the new contract, the following persons now had a share in the company, as in the first contract with a share of 20% each:

- a. the 65-year-old widow of Daniel Altenloh,
- b. the 72-year-old widow of Theodor Altenloh,
- c. the 81-year-old widow of the founder Johann Wilhelm Brinck with her children Henriette, Wilhelm and Franziska,
- d. the 44-year-old Ludwig Wellershaus (1814-1874), son of the founder Johann Wellershaus, who died in 1826, and
- e. the trading company Johann Eberhard Riecke & Söhne (1812-1894), managed by the 46-year-old Johann Eberhard Riecke, the son of the last living co-founder, the now 81-year-old Franz Arnold Riecke.

Offspring as co-negotiators

The contract mentions who participated in the negotiations beyond these partners – namely the aforementioned children of the 81-year-old widow Brinck:

- (1) Henriette: The 53-year-old was unmarried and “without any special business” or income.
- (2) Wilhelm: The early widowed 49-year-old worked at ABC and had two children, the 20-year-old Eugenie and the 18-year-old Matilde. His son with the same name, born in 1841, had already died in 1842 when he was only one year old.
- (3) Franziska: In addition to the 46-year-old, her husband Friedrich Rittershaus from Barmen took part in the negotiations, who - at least in later years - was also active in the company. Both had two small children at the time, 5-year-old Klara and 3-year-old Friedrich Herrmann.

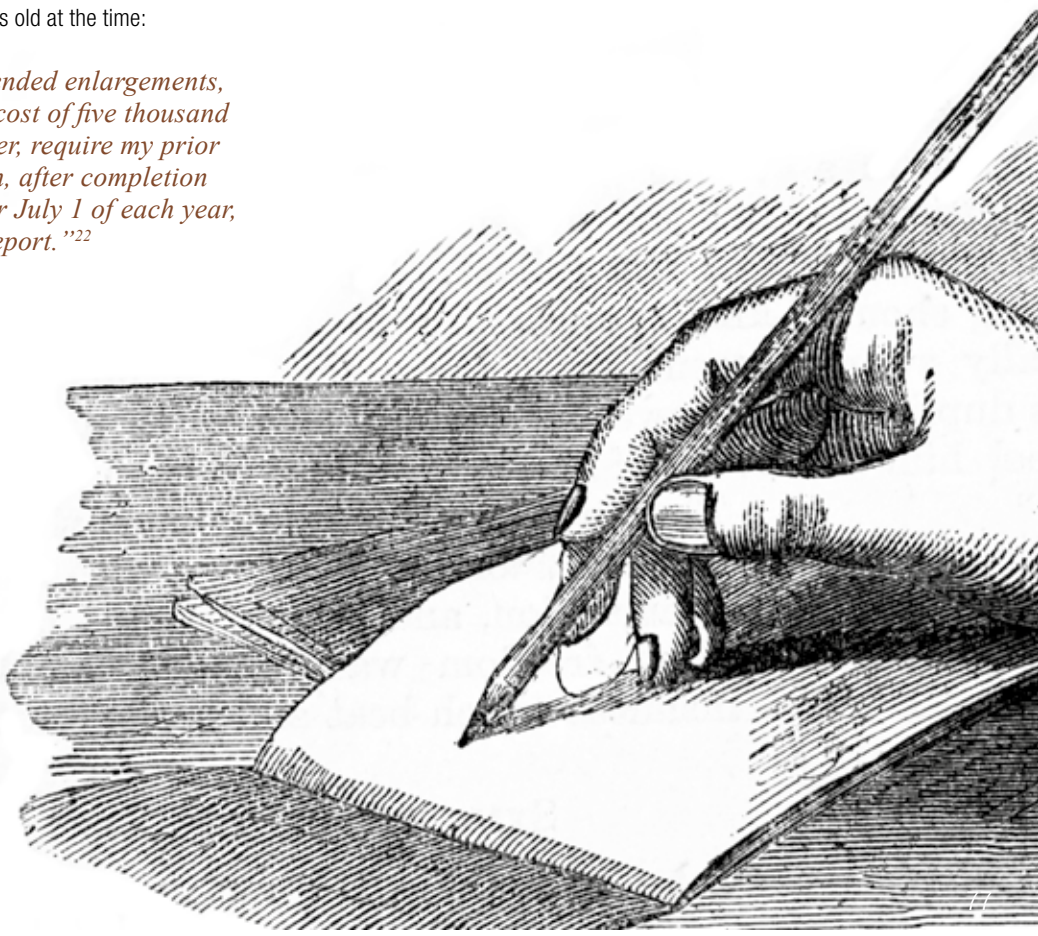
Lienkämper as witness

The very old Henriette could only sign with three crosses, “due to her inability to write for a long time, as she suffers from weakened eyesight”. Carl Lienkämper, a long-time employee, was present as a witness to the proceedings. Once again, it becomes clear what immense trust he enjoyed with all the families involved and how competent the “factory worker”²¹ must have been in such far-reaching matters by now.

Strengthening of married persons

The new Articles of Association also strengthened the rights of married persons. This is evidenced by a power of attorney from 1875. Eugenie Brinck had died in 1865 at the age of 27. Her husband August Lohmann (1828-1904) had remarried in 1868. In 1875, he gave his brother-in-law Friedrich Rittershaus power of attorney to represent his rights and those of his children from his first marriage and thus maintain their claims inherited from their mother – initially limited to six years. Paul, Helene and Walter Lohmann were 17, 18 and 20 years old at the time:

“In the case of any intended enlargements, if such could exceed a cost of five thousand Thalers, I shall, however, require my prior consent [...] in addition, after completion of the balance sheet per July 1 of each year, an accurate business report.”²²



Notary Public Wilhelm Heinrich Oswald Stute's cost note for the new Articles of Association of 1858

ABC in Paris in 1862: Widows there as well

The strong position of widows and other family shareholders was also evident later. In 1862, for example, the business in Paris would not have been possible without them. Johann Eberhard and Gustav Riecke, the sons of the founder Franz Arnold Riecke, and Frantz Corte lived in Paris and registered Altenloh, Brinck & Compagnie there. However, the three could not act alone in the name of the company. The following were registered as additional shareholders: Ludwig Wellershaus, widow Wilhelm Brinck senior, Johann Wilhelm Brinck junior, Henriette Brinck junior, Franziska Rittershaus née Brinck, widow of Daniel Altenloh and widow of Theodor Altenloh.²³

Clarification of land issue

Therefore, the company was to remain in the hands of the five families, and its existence should be secured in the best possible way in case of a possible withdrawal of the participants, according to the result of the new Articles of Association. The land issue was also resolved. The Brinck heirs would continue to provide the company with the premises, including the old and new buildings, free of charge for a limited period until 1869. In the event that they left the company, an expert would determine a fair rent.

1866: Further clarification on expansion

In 1866, the company decided to expand its premises to include the former residential estate of Daniel Altenloh. What had not been accomplished in 1858 was at least prepared for a year later: The daughter of the previous owner, Friedrich Heilenbeck, confirmed that her father had sold the house and land to Daniel Altenloh in 1823. The ownership situation was thus clarified, and the heirs were willing to sell the land adjacent to the company's premises to the company. Carl Lienkämper was again present to witness the sale, as he had been for the new Articles of Association.

1867: Death of Franz Arnold Riecke

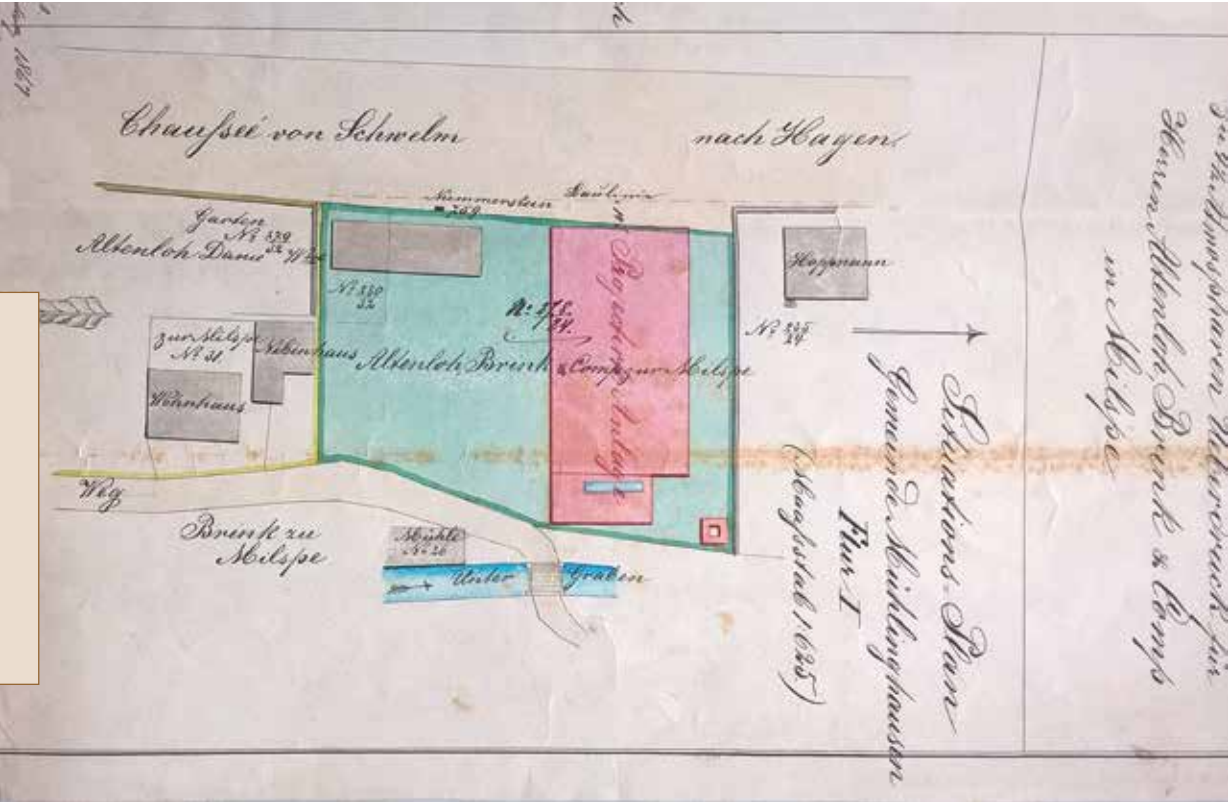
One year after this important expansion, the last of the five founders died at the age of 90, an unusually old age for the time. Franz Arnold Riecke was the only one of the co-founders who was able to negotiate new Articles of Association and successfully manage the transition from one generation to the next. The trading company, which he had inherited from his ancestors, continued to be a shareholder of ABC and was run by his eldest son Johann Eberhard, who in turn handed over the business to his son in 1868 at the age of 56.

Modernization: New buildings and machines

In addition to the generational change, the technical and economic development of the company also led to significant changes. In 1856/57, shortly before the new Articles of Association were signed, new buildings were erected and a first steam engine was installed. Another factory building with a boiler house was added in 1866 – a second steam engine was installed and new machines were purchased.

ABC plot and building plan 1867

This is an excerpt from the plans for the concession of another steam engine. A multi-story factory building with a boiler house and a tall chimney was planned for the “self-operated machines,” the use of which had been the subject of a long dispute between ABC and Funcke & Hueck. The new building was about four times as large as the old one and at least eight times as large.



Franz Arnold Riecke
04/03/1777 – 06/06/1867

Co-founder of the company
Altenloh, Brinck & Compagnie

Hydro power still important

Hydro power continued to be an important source of energy for ABC's production during this period, as evidenced by the 1858 Articles of Association. In addition to the company, Brinck's grain mill still stood on the site and was operated *“with 3 facilities,”*²⁵ i.e., three grinding mills. In the contract, the mill owner, Brinck, and ABC agreed on mutual consideration of water needs:

*“Mr. Wilhelm Brinck assures the factory company that in the event of a low water level, his mill located at the same pond where the factory is located may only grind with one facility, so that the factory retains the necessary water; on the other hand, the factory waives the use of the water for the factory for the days when there is a daily one-hour water shortage, insofar as it does not require it to feed the steam engines.”*²⁶

Construction management from the family network

The planning and construction of the new building in 1866 was not carried out by a general contractor, but by the family itself. Ludwig Wellershaus, Friedrich Rittershaus, and Eduard Asbeck, who was also part of the family network, served as the building committee. He was the younger brother of Caroline Asbeck, who had married the eldest son of the founder, Theodor Altenloh, and had nine children with him. The example of the building committee shows once again that all founding families continued to participate in decision-making and delegate individual tasks. The management group selected local contractors for the necessary carpentry, joinery, roofing, or glazing work, awarded the contracts, and supervised the construction.

Further renewal of production building

In the 1870s, the renovation and rebuilding continued. A new steam boiler was installed in 1870 and overhauled seven years later. In 1875 and 1877, to improve lighting, the production buildings were given the typical shed or sawtooth roofs that are probably the most distinctive symbol of industrial buildings to this day. This roof shape originated in England and provides natural light from the north without glare or shadows.

ABC Management

Carl Ludwig Wellershaus, technical director and managing director, died in 1873 at the age of only 33. He had installed the first automatic machines and developed the company as a whole. After his untimely death, continuity was ensured by Eduard Asbeck (1832-1889), who was documented as having been involved in the commission for the new building as early as 1866 and was given power of attorney in 1874. He was the husband of Elise Altenloh (1828-1898), the fourth daughter of the founder Daniel Altenloh, and the brother of Caroline Asbeck (1816-1891), the wife of Carl Theodor Altenloh, the son of the founder Theodor Altenloh. After his death, 25-year-old Albert Wellershaus also joined the company, becoming an authorized signatory the following year and commercial manager in 1876. In addition, the 59-year-old Wilhelm Altenloh (1815-1891), son of the founder Theodor Altenloh, was given power of attorney in 1874.²⁸

Growing workforce and compulsory education

From 1844 to 1853, the number of employees remained the same at 100, while in 1870 and 1873 there was a moderate and then significant increase, with 130 and then 250 employees. The high proportion of children and adolescents who had to attend school under the new law of 1839 was reduced. From 1853 onwards, the solution was to employ only those who were no longer subject to compulsory schooling – and to advertise for them in the Schwelmer Beobachter [newspaper]:

*“Boys & girls, who received their confirmation, as well as those who are allowed to work in a factory according to their school-leaving certificates, find permanent employment at Altenloh, Brinck & Cie.”*³⁰

Drawing study of ABC around 1866

This hand drawing by Altenloh, Brinck & Compagnie circa 1866 is a rather free drawing study made by Carl Ludwig Wellershaus (1840-1873).

As plans and later photos make clear, it shows more of a self-designed impression or planning idea, but not a depiction of the actual situation at the time or later.

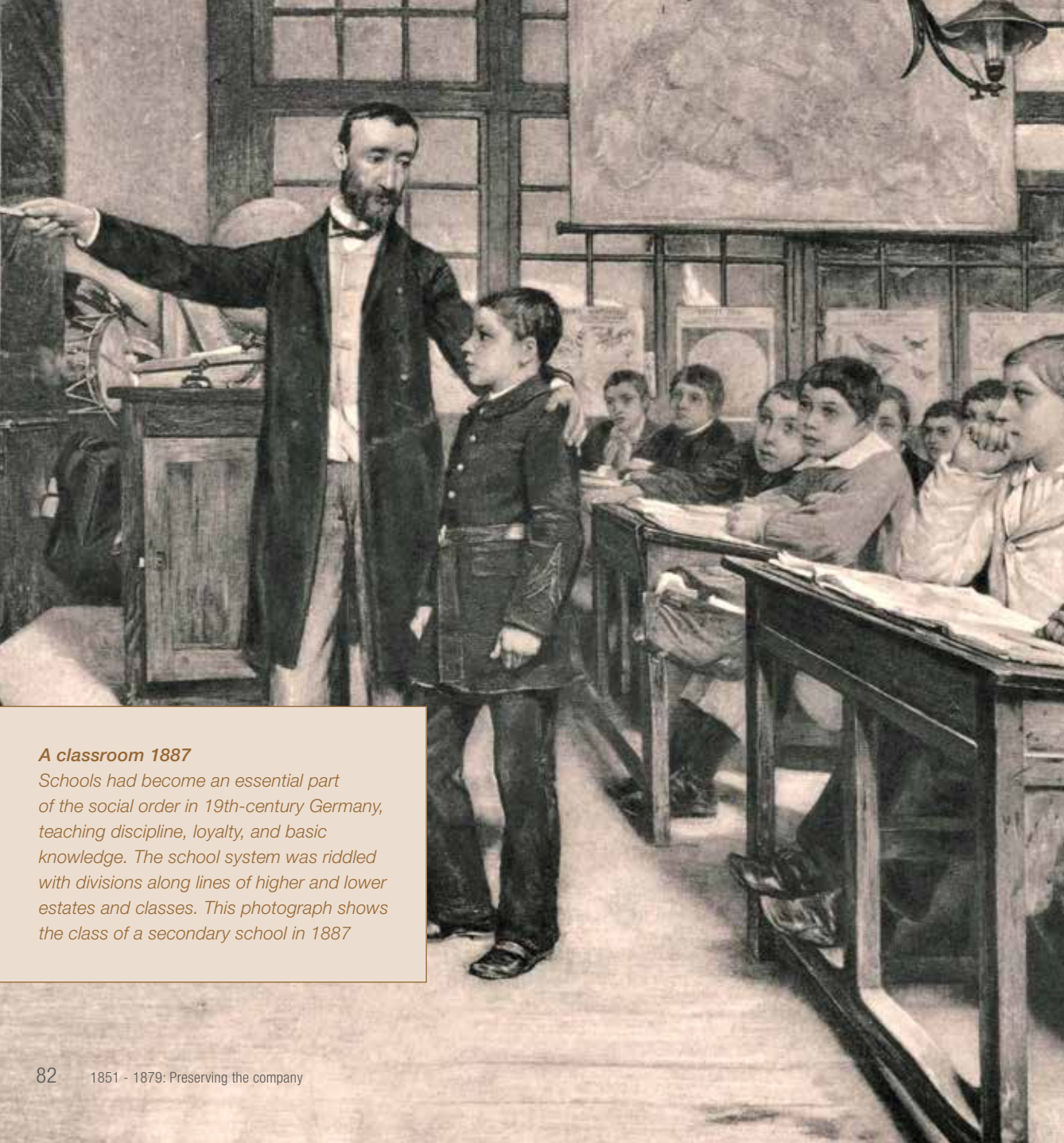


Left:
Carl Ludwig Wellershaus (1840-1873),
Technical Director ABC from 1865,
authorized signatory and later
chief managing director

Right:
His youngest brother Albert Wellershaus
(1848-1945), joined ABC in 1873,
authorized signatory from 1874,
commercial manager from 1876.



In 1873, the “Handbook of the Efficiency of the Total Industry of the Prussian State” shows a workforce of 250 workers for ABC.



A classroom 1887
Schools had become an essential part of the social order in 19th-century Germany, teaching discipline, loyalty, and basic knowledge. The school system was riddled with divisions along lines of higher and lower estates and classes. This photograph shows the class of a secondary school in 1887

Factory school at ABC

Starting in 1872, ABC set up its own factory school so that the young workers could actually attend classes. But the lessons were not very effective because the children were exhausted after a day's work, as Bornscheuer, the district school inspector in charge of Langerfeld, reported:

“Since 1873 the teacher H[osselmann] at F[riedenshöhe] has been teaching every afternoon from 4-7 o’clock. The school is currently attended by 17 children. The small number of students makes it possible for the teacher to respond to each individual child and to promote the weaker ones more quickly than can happen in a school attended by 80 to 90 students. [...] The children have already worked six hours in the factory, and the teacher H. taught 5 hours [...] when the lessons in the factory school begin. [...] The last inspection showed that several children were very behind in reading, almost completely unfamiliar with language teaching, and very untrained in writing small essays. [...] It must be taken into account that only a few factory children [...] can prepare themselves very little at all for lessons at school, because they come home tired between 7 and 8 o’clock and go to the factory early in the morning.”³¹

The attitude of the authorities became more harsh over time. In 1878, it was finally found *“unacceptable at all to employ school-age children in the factories,”*³² and also stated that *“there is no lack of laborers who can be used unschooled.”*³³ These changes led to the closure of ABC’s factory school in 1879.

Carl Lienkämper’s golden working anniversary

One factory worker for whom the rules were very different when he started working was Carl Lienkämper. He started working for ABC in 1825 and was the first employee to celebrate a golden jubilee. On Saturday, July 3, 1875, he looked back on 50 years with the company - more time than any of the five founders had spent here. The Hagerer Zeitung [newspaper] reported on this extraordinary celebration:

“The celebration held here last Saturday by Messrs. Altenloh, Brinck & Comp. to mark the 50th anniversary of their worker Carl Lienkämper was a celebration of joy in the full sense of the word for the workers of the factory. The company did everything in its power to make the celebration a splendid one, for which they received due recognition from the workers. The gentlemen, some of whom live very far away (e.g. in Leipzig and Godesberg), were all present.”³⁴

This anniversary celebration was also a celebration of the company itself. There was a parade, fireworks, a festive concert, coffee together in a pub and, of course, gifts. The jubilarian thanked the company with a newspaper article:

*“Heartfelt thanks!
Many thanks to all those who honored me on my jubilee day (July 3) in such a surprising way that I had to ask myself, what did you do to deserve all this?”³⁵*



Carl Lienkämper thanks ABC in the Hagerer Zeitung of 7/8/1875 for his jubilee celebration

ABC's Health and Support Fund

Social benefits for a company's employees were long uncommon. It was not until 1883 that health insurance became mandatory in Germany, but there were companies that provided such benefits very early on. For example, the E.J. Clauß cotton mill in Plaue, near Chemnitz, provided health insurance as early as 1823, the year ABC was founded, and added disability, widow and orphan benefits, and accident insurance in 1872. Altenloh, Brinck & Compagnie introduced a company health insurance fund for its employees on February 29, 1856³⁶ – long before a legal requirement was foreseeable. In 1868, the company added a provident fund to protect its employees and their dependents against the risks of death and disability.³⁷

Commitment to workers

Such voluntary benefits were not only intended to make a company more attractive, but also to retain employees - social security was not yet a major concern. Many entrepreneurs saw themselves in the role of patriarch, the caretaker of their subordinate workforce. Few were aware of the glaring contradiction between the mass impoverishment of the lower income strata and the economic boom of the state and the economic bourgeoisie, but a number of them tried to develop solutions within their own circles of influence and beyond. Among them was the “Central-Verein für das Wohl der arbeitenden Klassen” [Central Association for the Welfare of the Working Class], which was founded in 1844 by businessmen, civil servants, and educated citizens in response to the workers’ revolts of the Silesian weavers and existed until 1914. The emerging self-organization and self-representation of workers, on the other hand, was viewed critically.

The benefits to protect employees from existential risks at ABC continued to increase. This can be seen, for example, in the statutes of the ABC company health insurance fund – here the version from 1884



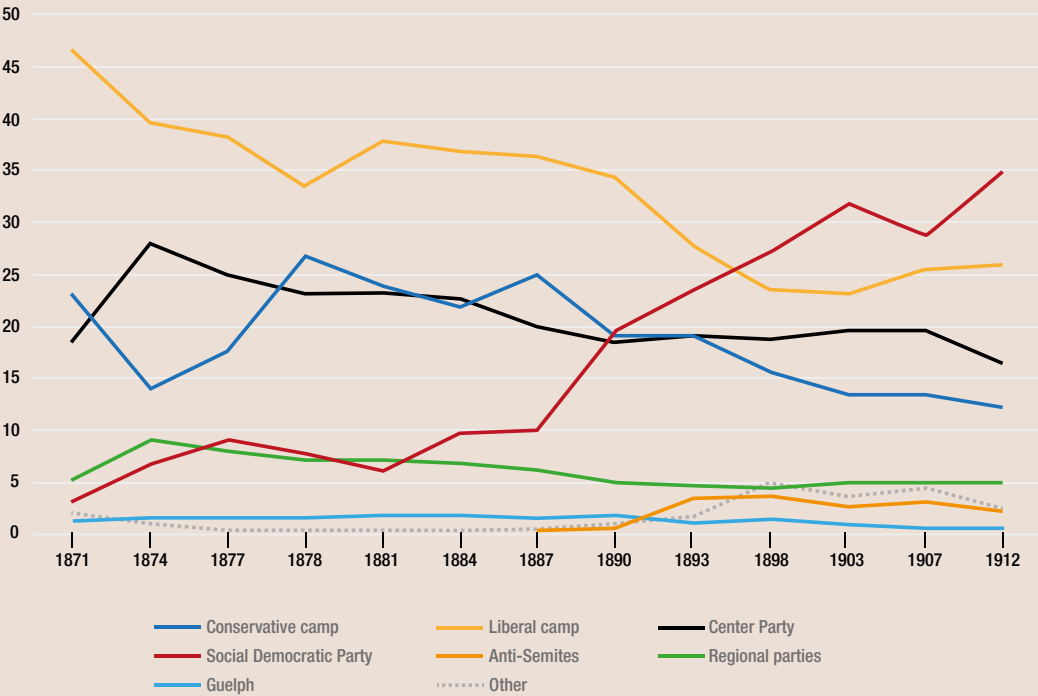
1877: Membership in the Association for Social Policy

ABC was a member of this association in 1877, as were other entrepreneurs in the region, including Alfred Krupp, Franz Haniel, Johann Caspar Harkort, and Carl Elbers. The association's journal of 1877 illustrates why the development of a corporate and social policy was increasingly seen as politically imperative in business circles – in the Reichstag elections of 1871 to 1877, the Social Democratic vote had increased more than fivefold:

“what touches this journal [...] most closely are the victories of German Social Democracy. [...] This fact cannot be taken seriously enough, because it is the symptom of a deep discontent of large masses of people.”³⁸

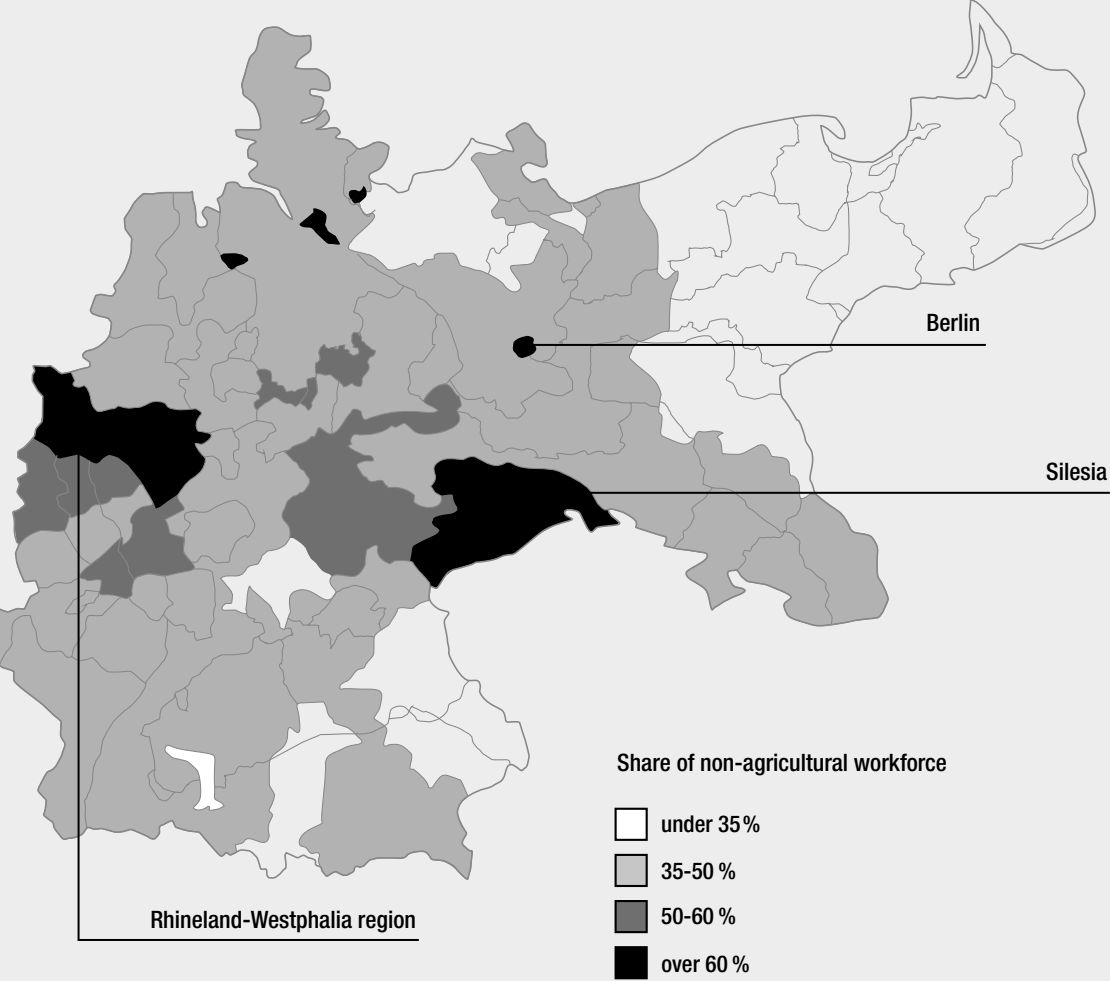
The annual journal called itself “Der Arbeiterfreund” [The Worker’s Friend] in a well-meaning and paternalistic manner. It saw itself as a “specialist journal and repertory for scientific and practical discussions in the great field of the workers’ question,” which “corrects false facts, refutes errors” and provides an “objective report on the course and aims and the main means of supporting the socialist movement.”³⁹

Vote shares of the parties in the Reichstag elections 1871-1912 in percent: Votes for the Social Democratic Party increase sharply



1880 - 1913:
Under the sign of growth

Gainfully employed persons outside agriculture in the German administrative districts in 1882



The founding of the German Empire as a German nation-state in 1871 created an organizational framework for economic activity that had a lasting impact on the further development of the German economy. In the strong monarchist authoritarian state, the highly respected civil service system effectively enforced these innovations.

New framework of doing business

Among the changes sought were the standardization of measures, weights, and coins, the establishment of the Reichsbank, the postal and railroad systems, and the creation of a national legal system, including a civil code. There were visible innovations in economic and social organizations: Associations, cartels, social insurance, universal banks, recognized trade unions, joint-stock companies, institutions of advanced research or municipal utilities.

Rise to an industrial and economic nation

New growth industries and science-intensive sectors, such as electrical engineering, chemicals, and optics, were added to the previous leading economic sectors, making Germany a leading exporter of technology. The country developed more and more into an industrial state and an economic nation. Its share of world industrial production rose from 4.9 to 13.2 percent between 1860 and 1900, ranking third after Great Britain and the United States.

Good business development at ABC

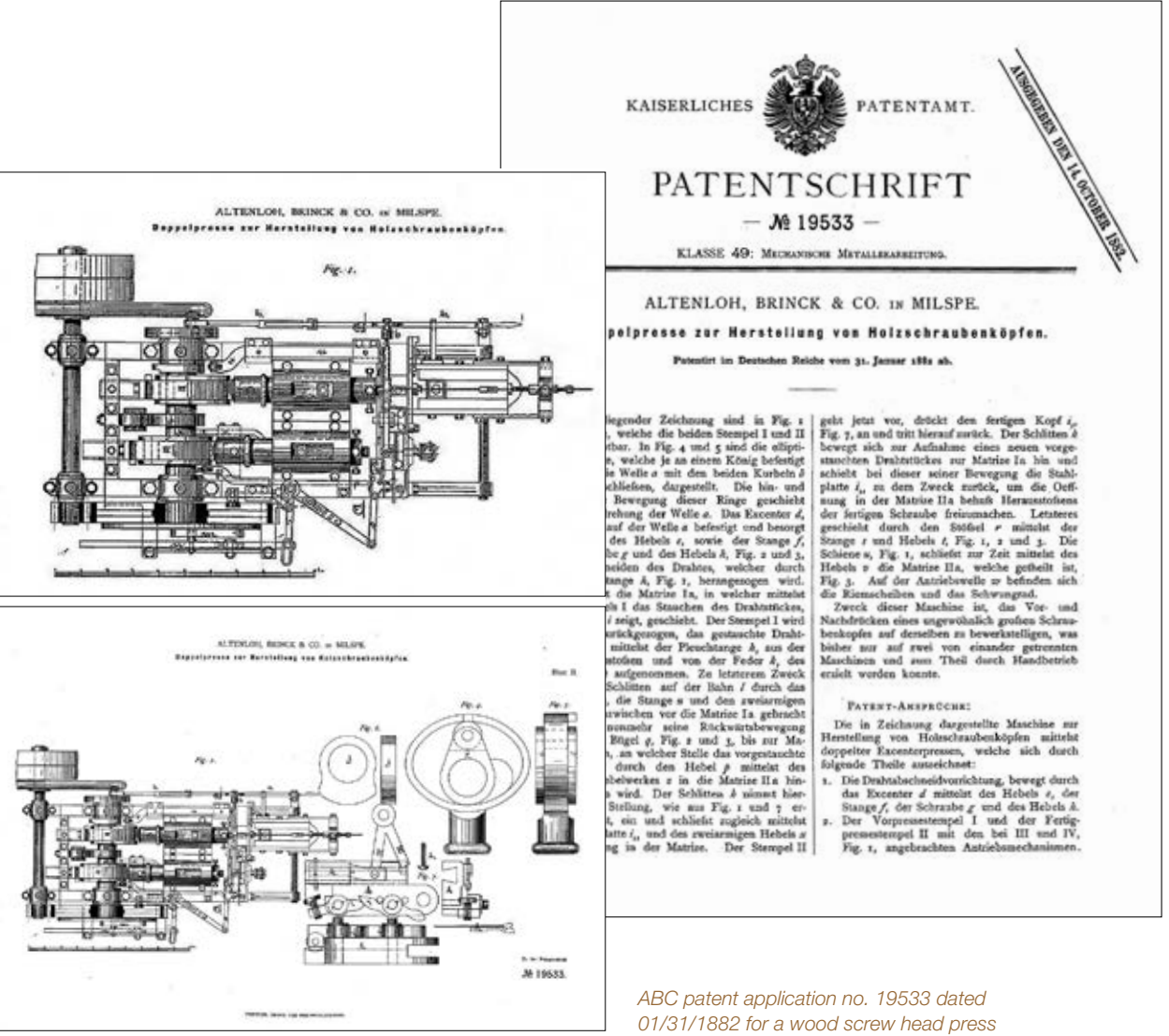
ABC also benefited from the improved structures, organizational foundations and framework conditions, as well as from the general economic development. The 1870s and 1880s were financially good times for the company, and even the temporary crisis that followed the founding boom of 1871-73 did little to change the positive mood.¹ Altenloh, Brinck & Compagnie was on the right track.

German Patent Act of 1877

In 1877, the German Patent Act was passed, establishing today's modern understanding of the term: In return for disclosing an invention, one receives a limited property right and thus exclusive use. The new patent law enabled ABC to protect its inventions with greater legal certainty than before. From the very beginning, ABC's goal was to automate the production of wood screws and to perfect the manufacturing process. Hand production was to become machine production and separate machine production steps were to be combined.

ABC patent 1882: Wood screw head press

The ABC patent application No. 19533 of January 31, 1882 for a wood screw head press is an expression of this approach and vividly illustrates the progress that had been made in the development of screw machines in the preceding decades. The complex machine, for which a patent had now been applied, made it possible for the first time to pre-press, post-press and press large screw heads. Two previously separate operations could now be performed in sequence on a single machine. In addition, there was a suitable device for ejecting the finished workpiece.²



Patent for a threading machine

Another example of an important Altenloh, Brinck & Compagnie patent is a machine for cutting a wood screw thread. Patent No. 7145 from 1900 is characterized by a particularly precise fit between the workpiece and the machine part. It literally states: *“When using a milling cutter with a smaller diameter than the worm wheel driving it, the correct rolling of the milling cutter on the screw to be threaded is obtained [...] by the spindle driving the worm wheel”* being precisely guided towards the milling cutter.³

ABC Management

The patent for the wood screw press was filed in 1882, while the management of the company was in the hands of Eduard Asbeck, Albert Wellershaus and Wilhelm Altenloh. Starting in the 1880s, the next generation took over. In 1884, 27-year-old engineer Carl Robert Dicke (1857-1930) joined the company, becoming deputy managing director in 1895 and managing director in 1920. In 1895, 24-year-old Felix Wellershaus (1871-1939) began working at ABC, assisting his uncle Albert Wellershaus in the commercial management. He became an authorized signatory in 1903 and managing director in 1920.⁴

Success factor liability limitation

For a long time, investing in businesses was very risky because there was no way to limit liability. In Great Britain, it was possible to limit liability as early as 1855 – with a limited company, or Ltd. In Germany, a law in 1892 paved the way for the limitation of liability in corporations and the creation of a GmbH, or limited liability company. It quickly became the model worldwide and is now the most common form of business organization. ABC did not wait long to take advantage of this opportunity.

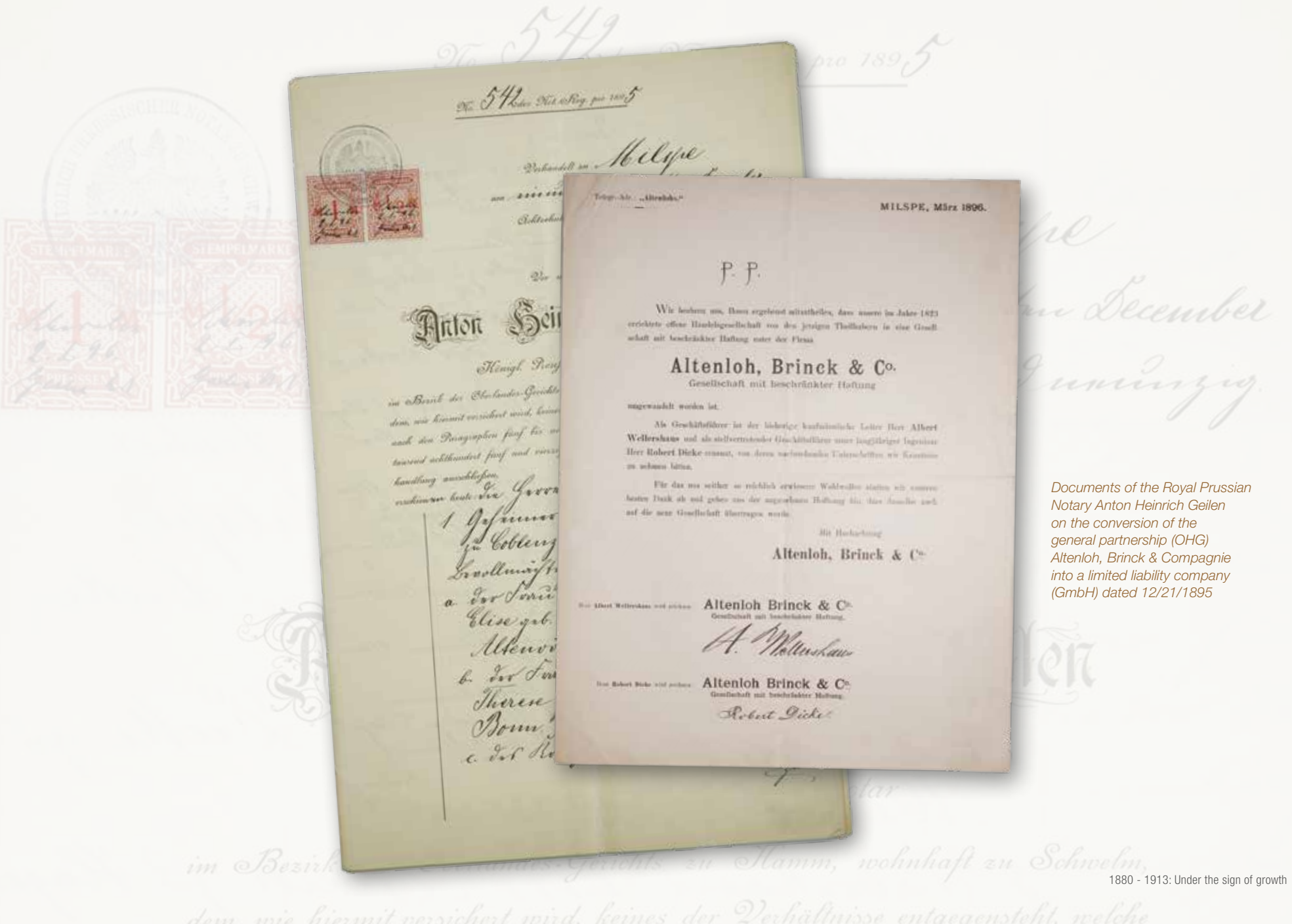
1895: Transformation into a limited liability company

On Saturday, December 21, 1895, some 35 descendants of the five company founders met in Ennepetal-Milspe to notarize the conversion of the general partnership Altenloh, Brinck & Compagnie into a limited liability company. According to the agreement, the purpose was:

“Continuation of the manufacture of screws and other metal goods previously carried out by the general partnership Altenloh, Brinck & Co in Milspe, as well as the establishment of branches and participation in similar businesses.”⁵

Organization of the limited liability company

The share capital was 1,800,000 marks, which would be about 14 million euros today. The following organization was established: The shareholders’ meeting elects a 5-member *“Supervisory Board”* in which each founding family is represented – from 1957, the body is referred to as the *“Advisory Board.”*⁶ The managing director of the GmbH and his deputy are elected by the supervisory board. The supervisory board also elects a chairman including deputy every year and convenes a shareholders’ meeting in December each year. Since at that time still guardianship for females existed and women were limited in their legal capacity, it was added: *“female persons who are entitled to dispose of their assets are entitled to participate in the shareholders’ meetings.”⁷*



Documents of the Royal Prussian Notary Anton Heinrich Geilen on the conversion of the general partnership (OHG) Altenloh, Brinck & Compagnie into a limited liability company (GmbH) dated 12/21/1895

Interest groups emerge

Over the course of the 19th century, more and more people joined together in associations based on their interests, whether they were singing groups, fraternal orders, savings associations, lodges, or pharmacists' associations. Mergers also took place along economic-political lines, for example in a trade association, such as the Association of Wood Screw Manufacturers in 1861, or in the “Central-Verein für das Wohl der arbeitenden Klassen” [Central Association for the Welfare of the Working Classes], a kind of counter-organization to the workers’ associations, which were forbidden for a long time. After the founding of the German Empire in 1871, the early associations developed into centralized, often nationwide interest groups, i.e., federations.

Division of the wood screws market

As early as 1861, the wood screw manufacturers had formed an association. Their voting body was a quarterly general meeting in Elberfeld, but the three companies with the highest sales set the tone: Altenloh, Brinck & Co, Funcke & Hueck, and the Westphalian screw factory Gerdes & Co of Schwelm. In the 1880s, the market was divided among them as follows: The three market leaders each secured a 20% share, Falkenroth & Kleine of Schwelm received another 10%, and the smaller companies each received less than 10%. These included Isaac Tillmanns of Neu Cronenberg, Draht- und Schraubenfabrik Falkau, C. Winkelmann of Berlin, Friedrich Boesner of Augustenthal, and Hüser, Rentrop & Cie of Gevelsberg. Terms of payment and transportation were regulated. Above all, important customers such as railroads, exporters, artillery and naval workshops wanted better regulations for themselves as manufacturers.

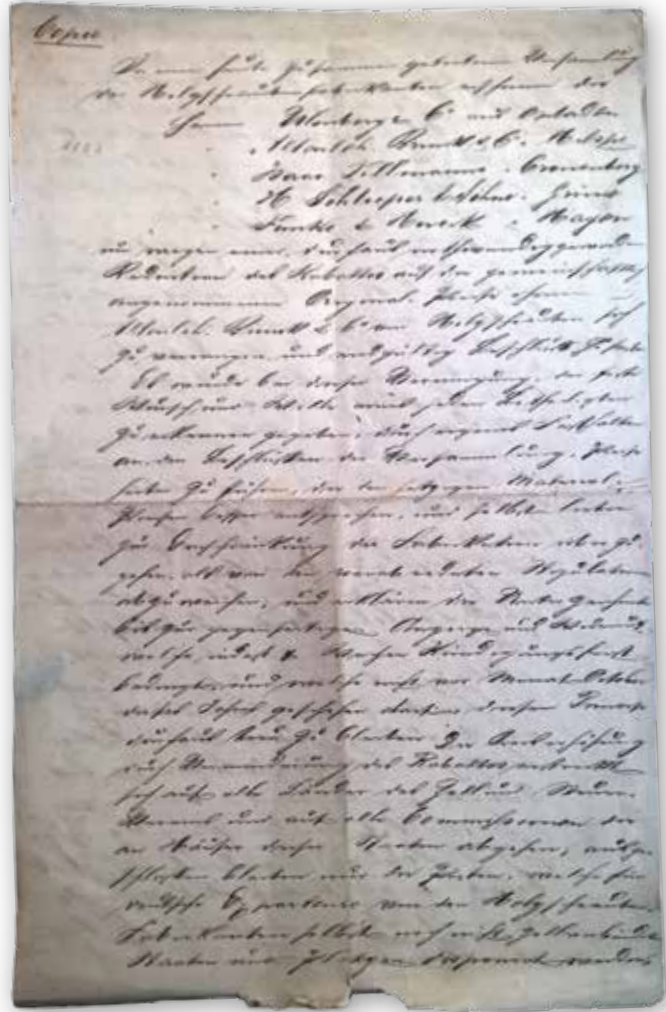
Wood Screw Association Limited Liability Company

After 1900, the economic situation for wood screw manufacturers became more difficult and several smaller manufacturers were bought out. In 1905, the sales office of German wood screw manufacturers, Holzschrauben-Verband GmbH [Wood Screw Association Limited Liability Company] was founded in Düsseldorf. Eleven of the then existing manufacturers were represented. They were largely satisfied with the merger, as they were able to agree on working arrangements.

No merger as a stock corporation

In 1908, the idea of merging individual manufacturers into a joint stock company arose. Amendments to corporation law in 1870 and 1884 had further improved this form of organization. Possible goals for the wood screw manufacturers would have been cost savings and division of labor. ABC, however, had little use for such a concentration process:

“Our factory is equipped with the best machines protected by patents; therefore the value of our machines is considerably higher than is the case with those factories that still have older, less efficient machines that need to be rebuilt. [...] For my own part, I do not consider myself justified in subjecting the [family] tribe I represent to such a daring experiment and therefore plead for the previous solid ground under our feet.”⁸



The “Sales Office of German Wood Screw Manufacturers” of 1905 goes back to the earlier merger of these companies. These minutes of the meeting of the “united wood screw manufacturers” of 1855 show how early this merger was formed.



ABC building around 1925

Idealized depiction of the company's property and building existence.



ALTENLOH, BRINCK & CO, MILSPE / WESTPHALIA



ABC arc triangle:
The logo in its first design
from 1897.

New trademark laws

Trademarks were originally intended primarily to protect against counterfeiting and deception. Over time, the legal options available to a trademark owner have increased. Important steps in this process were the Trademark Protection Act of 1874 and the Act on the Protection of Designations of Goods of 1894, which for the first time enabled the registration and legal protection of figurative and word marks in Germany. They also brought greater clarity, differentiation and legal certainty to trademark law. It was now possible to better defend one's own trademark to ensure its distinctiveness and to prevent unauthorized use. In modern business life, the trademark has become an indispensable means of identification.

Trademark registration 1897

Altenloh, Brinck & Compagnie now made use of this trademark right, exactly 30 years after the trademark "A-B-C screws" was first mentioned in an overview reference. On Monday, May 17, 1897, the ABC arch triangle was registered as a trademark, the basic shape of which is still the company's logo today. The trademark was registered in Class 6, which includes products such as wood screws, carriage bolts or iron threaded screws.

The ABC arch triangle

The arch triangle was registered as a figurative mark. It shows a slightly outwardly curved triangle enclosing the core product, wood screws, as well as the three initials. The letters stand for the founders – for Theodor and Daniel Altenloh, for Johann Wilhelm Brinck and, as partners or co-partners, for Johann Christoph Wellershaus and Franz Arnold Riecke. Through the bright red filling of the form, the white letters and the three black wooden screws in the middle stand out clearly. The color and play of light in the arch triangle suggest that the company and its core product are encased in gold and thus distinguished.

Oldest ABC business card 1903

The oldest ABC business card in the company's archives dates from 1903. It shows perhaps the most important generalizing statements a company could use visually at that time: the medals from the three World's Fair participations and an idealized depiction of the company's premises. These images can also be found on the letterheads. They were used to illustrate the importance and efficiency of the company. There was a certain amount of exaggeration and idealization in the presentation of the company, whether it was the grounds, the buildings, the surrounding landscape, or the railroad connections. Many companies of the time presented themselves in this way. Later, the representative image receded in favor of a more objective portrayal.



The medals that ABC had received at the World's Fairs from 1851 onwards were still used for advertising after 1900. Here, for example, the business card and letterhead from 1903 with the idealized building stock – the letterhead was still used for a long time, here in a letter from 1926.

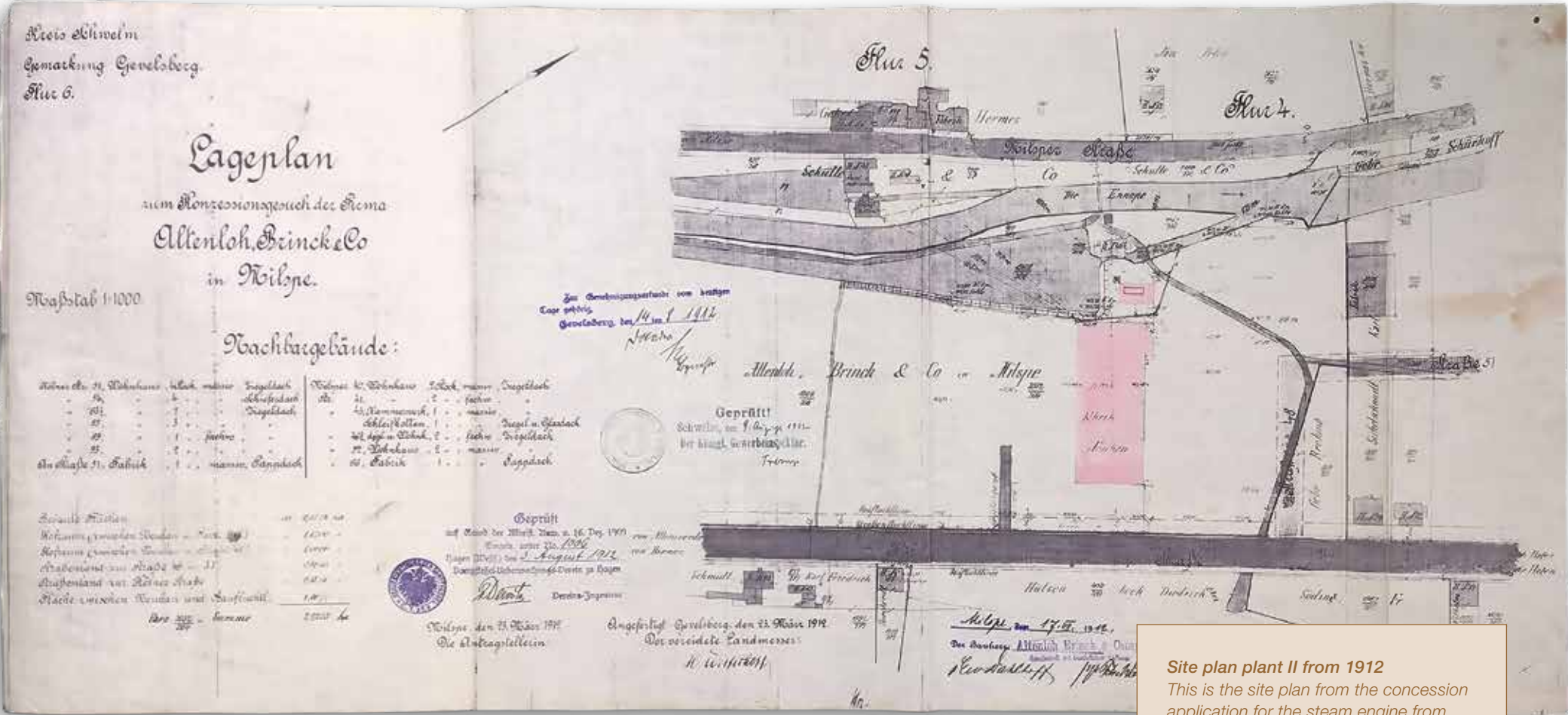


Construction activity reflects corporate growth

The positive business development of the 1870s to 1890s was also reflected in the buildings. The factory and administration buildings on what is now Kölner Strasse – then called Chaussee or Provinzialstrasse – were continuously expanded, and the site was densified at regular intervals by further extensions and conversions. In 1883, a major building project was planned, but this time it was managed by an external architect, i.e., the company was no longer responsible for the project itself. The project primarily affected the site of Altenloh’s residential building, which housed the office and business premises. For the first time, workers’ housing was to be built on the site in “solid brick construction.” The adjoining building was to be replaced by a warehouse for “sawdust, packing material, barrels, baskets, boxes, straw, charcoal, etc.”

Other new buildings and Wilhelminian style façade

In 1885, another building was constructed behind the two buildings that faced the street and were now connected – two stories high and again with shed or sawtooth roofs for good lighting. A third building was constructed between the Altenloh residence and the factory. By 1890 at the latest, the former Brinck grain mill had become the company’s forge – with two boiler houses and two chimneys. In December 1898, permission was granted to rebuild and renovate the building, so that ABC’s famous Wilhelminian-style façade must have been created in 1899. Four years later, the site was almost completely enclosed.



Site plan plant II from 1912

This is the site plan from the concession application for the steam engine from 1912. It shows the planned new factory building, which is located between the Kölner Straße and the Ennepe. The gray triangle on the left above the building is the old hammer pond.

Plant II in Gevelsberg

When production could no longer be expanded at the original location, a new site was acquired in 1911. It was located only 1.5 kilometers away at Brüggerfeld in Gevelsberg, a 20-minute walk. Construction of the new Plant II began in 1913, and upon completion the machines were initially taken over from the Ennepetal-Milspe facility. The new plant also produced the hot and cold formed “raw screws and nuts” that were common at the time, primarily wood and machine screws.

Art Nouveau Villa

Behind the Wilhelminian façade of the company buildings, another expressive building was erected in 1899: an Art Nouveau villa as a “director’s apartment,” as ABC, the owner of the building, called it. Like the company’s façade, the building, as was customary at the time, represented the economic success and awareness of the company and the entrepreneurial family. The villa is located only 400 meters above the company and 200 meters from the railway station, the most important means of transportation in those days. The three-story country house style building was designed by Hagen architect Emil Eichelberg, who planned and built several bourgeois villas in the area. The richly structured building has a crippled hip roof, a high corner tower, half-timbered elements, a winter garden, and offset gables and ridges. At the time of its construction, the unusual building “attracted crowds of onlookers”¹⁰ – today it is under conservation order.

Residents of the villa

The house was built and co-designed by Carl Robert Dicke (1857-1930), the then 42-year-old managing director of ABC, who had married Mathilde Dulheuer (*1869) four years earlier. They moved in with 2-year-old Elisabeth and Robert, who had just been born. In 1924, their now 25-year-old son and his 19-year-old wife Margarete moved in. During World War II, the villa was hit by several incendiary

bombs and was only saved by ABC’s plant fire department. Later, Robert (1899-1977) and Margarete Dicke (1905-1997) had the building modernized. Around the turn of the millennium, Kristian Dicke (1963-2001), the grandson of the builder, lived here with his family for several years. After his untimely death, ABC sold the property in 2007.

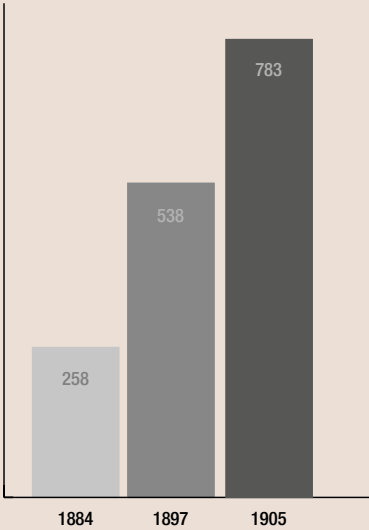


Fast growing workforce

The growth of the company is also reflected in the number of employees. In 1884, there were 258 employees; by 1897, there were 538, and by 1905, there were 783. Within 20 years, the number of employees had tripled. The proportion of men was about 55%.¹² As a result of the legislation, the previously high proportion of minors in the workforce had been significantly reduced. In 1884, 44% of the workforce were adults, i.e., over 21 years of age, 38% were between 16 and 21 years of age, and 18% were between 14 and 15 years of age.¹³ From 1891, workers under the age of 18 were obliged by the authorities to attend the local “*training school*”:

“§ 1: All industrial workers (journeymen, assistants, apprentices, factory workers) regularly residing in the said district shall be obliged, until they reach the age of 18, to attend the public industrial training school established here on the determined days and hours and to participate in the instruction.”¹⁴

Growth of the ABC workforce from 1884 - 1905



Creation of company housing

The construction of housing for workers had long been considered by ABC as a way to bind them to the company. Beginning in 1910, company apartments and houses were built on Heimstraße in Ennepetal, above the company’s headquarters, and more were added in the following decades. These apartments and houses were owned by the company until 2005 and provided housing for employees.

Simple regional housing, drawing by Marie Bilstein (1876-1969)



1883: Health insurance law

ABC employees had been covered by the company’s health insurance since 1856, but compulsory health insurance was introduced 27 years later, in June 1883. This created a compulsory insurance scheme for “*persons employed for wages [...] in factories,*” which was controlled by the municipal authorities with verification lists. In 1884, two factory health insurance funds were registered in the relevant industrial district: the ABC fund and the J.D. Auffermann metal rolling mill fund. The neighboring municipality of Voerde registered a total of 18 companies with health and welfare funds. The health insurance funds continued to be closely linked to the respective companies, so that a coexistence of company health insurance funds and general local health insurance funds developed. It was only in 2007, after 151 years, that the company health insurance fund of ABC, like those of many other companies, was separated from the company and outsourced.

Change in working conditions

Restrictions on child labor in 1839 and compulsory health insurance in 1883 were important measures to improve occupational safety, followed by the first international conference on occupational safety in Berlin in 1890 and the ban on Sunday work in 1891. In fact, as industrialization progressed, the earlier rhythm of work and rest was increasingly disrupted, and working days became longer. From the 1830s, the six-day workweek with daily working hours of 14 to 16 hours became the norm. However, under the influence of the strengthening of workers’ organizations, the emergence of social-democratic parties, and the growth of trade unions, the political climate of opinion changed.

Plant I around 1900

This photo shows the view of Plant I as seen from Klutertberg: in front on the left the exhaust stacks of the forge, in the back on the left the main building with office, fabrication and warehouse. In the background, factory buildings and the "girls' dormitory" can be seen, as well as the Ennepetal train station on the slope at the back right.



Working hours and regulations

In 1900, the legal working hours were limited to 10 hours a day, six days a week. This was implemented in the following years. This is also reflected in an announcement in ABC dated December 19, 1904. It also makes clear how work, working hours, breaks and conduct were regulated. Including breaks, workers spent 12 hours at work.

“As of January 2, 1905, the 10-hour workweek is introduced at our plant.

The regular daily working time is from 7 o’clock in the morning to 7 o’clock in the evening. The rest period between work is considered to be the time:

*in the morning from 8 1/2 to 9 o’clock
noon from 12 to 1 o’clock in the
afternoon from 4 to 4 1/2 o’clock*

Each worker shall be punctual both in the morning and after each break and shall not leave his post before the end of working hours. Setting up to leave work, for shoe shining, washing, combing, changing clothes, as well as idle standing around, singing, reading, crocheting, knitting, drinking coffee during working hours is prohibited under penalty.

The cleaning of the machines takes place on Saturdays from 4 - 5 1/2 o’clock in the afternoon. Prior cleaning of the machines or other equipment is prohibited. The masters and operators of the individual halls must ensure that the above regulations are strictly observed.”

Trade inspection supervises working conditions

The company's management was not always able or willing to respond quickly to the growing demands for occupational safety. On February 11, 1909, the Royal Trade Inspector of the Schwelm district informed the authorities of the Ennepe-Milspe district that ABC had repeatedly failed to meet the requirements of the trade regulations. A police order followed five days later. The company was ordered to provide sufficient fresh drinking water in the seven workrooms, to improve the operating conditions for the grinding wheels and cleaning drums, and to refrain from storing materials behind the rumbling drums used for deburring.

Struggle for occupational safety

ABC appealed to both the district president in Arnsberg and the minister of trade in Berlin. The authorities insisted that two drinking water taps for 711 workers was not enough and that the grinding equipment was not safe enough. The minister supported the local authorities:

“The existing taps for fresh drinking water are inadequate. Each of the seven workrooms must have a tap for good drinking water with drainage basins below, [... which] can also be used for fire extinguishing purposes in the event of a fire. [...] The sandstone grinding wheels operated by elemental force are to be provided with permanent disengaging devices [...] I also reject your further complaint against the [decision of the District President] as unfounded.”

Subsequent improvements by the company and further inspections by the authorities followed, until on April 13, 1911, it was finally noted *“that the measures taken by the company are sufficient.”*¹⁵

ABC after 1877

Image collage showing the building stock after 1877 and a photo of the male workforce of all ages and the management team.



1914 - 1932:
In the wartime economy
of World War I and the crises
of the Weimar Republic

The 19th century had seen many political tensions in Europe, which ignited in 1914 with the assassination of the Austrian heir to the throne in Sarajevo, escalated with the German Empire's declaration of war on the Russian Tsarist Empire, and led to the First World War (1914-1918/19). The war also marked the end of the German Empire, a constitutional monarchy, and Germany became a parliamentary democracy for the first time, the Weimar Republic.

German economy in the First World War

Beginning in 1896, the naval policy of the German Empire began an arms race that fueled tensions in the European system of states. The German economy was converted to war production. As a result, supplies to the population suffered, but war-related businesses profited as government contracts created a strong war economy. However, the conscription of millions of men into the military led to labor shortages and legal work obligations.

ABC profits from war economy

The Märkisch small iron industry, including screw manufacturers, also profited from war production; the order situation was predominantly good. The annual report of Altenloh, Brinck & Co. looked back on the war years with satisfaction, “From year to year, the number of orders for army supplies on land and water has increased.” In 1919, the company was again able to pay a dividend to its shareholders, as the balance sheet for 1918, the last year of the war, was also positive:

“During the year under review, shipments of wood screws, iron thread and carriage bolts were a continuing brisk.”



Modernization ABC logo 1920

More than two decades after its creation, ABC's logo, the arch triangle, was slightly modernized. The characteristic shape was retained, but the color scheme and lettering were changed. Now, not only did the frame stand out three-dimensionally with a shadow effect, but so did the company's initials. The ornamental strokes at the beginning and end of the letters, the serifs, disappeared. The color scheme was reduced to red, white, and black – and the lighter white became the background color.

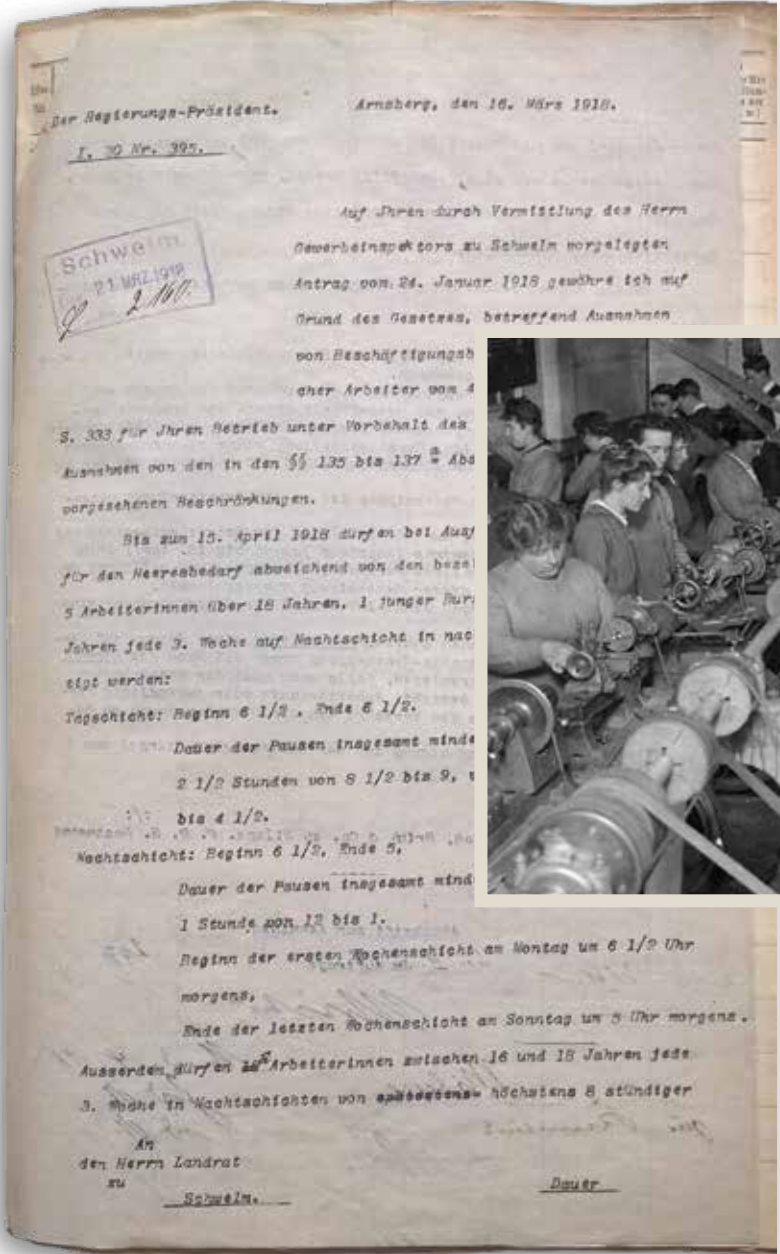
ABC price lists from the 1920s with prices in Reichsmarks

Labor shortage in wartime

However, the shortage of manpower was a problem in view of the good order situation. While the number of employees before the outbreak of war was 760, by the end of 1918 it had fallen to 434, a drop of more than 40% – and this applied almost equally to men and women. While there was a slight surplus of men in the workforce before the war, this shifted to a slightly higher proportion of women during the war years. Of the 373 male workers, 162, or almost half, were drafted. Of these, 17 were killed in action and two were missing at the end of the war. But the number of female workers had also fallen during the war, from 387 to 227, or by more than 40%. The shortage of workers proved to be a problem for the company:

*“With the number of orders for army supplies on land and sea becoming more and more significant from year to year, it was exceedingly regrettable to hear what difficult circumstances it caused to get drafted and downright indispensable skilled workers released again.”*²

ABC press:
The pressing machines are lined up along the window front, with the reels with the wire coils to the left.



Female workers in a factory around 1918



Exemption for employment of young workers under 18 and young women both under and over 18 on night shift at ABC in 1918.

Occupational health and safety exemptions

In 1918, in order to meet the needs of the war economy, exemptions were made to the legal regulations on health and safety. In principle, they were possible for young workers under 18 years of age and for young women under and over 18 years of age on night shifts, but in each specific case they had to be requested by the companies.³ ABC had also requested such exemptions for two female employees between the ages of 16 and 18 and one “young boy” between the ages of 14 and 16. The exemption for ABC was subject to the following conditions, including:

*“During breaks, including at night, workers shall be provided with adequate recreation rooms, lighted and heated as needed, and adequate separate washing and dressing rooms. Decency and good manners shall be maintained by appointing a responsible supervisor.”*⁴



ABC advertising poster around 1930

ABC night shift in 1918

The permit allowed the minors to work the normal adult night shift. This meant one night shift every three weeks from 5:30 p.m. to 5 a.m. with a one-hour break, or 10.5 hours a day in a six-day week. During the night shift, people worked until dawn on Sundays and started the new work week at 6:30 a.m. on Mondays.

ABC screws according to DIN standard

Still during the war, on December 22, 1917, the Standards Committee of German Industry was founded, the most important national organization for standardization in Germany, which became the German Institute for Standardization in 1975. Since then, the association has been responsible for, among other things, defining the DIN standard – a voluntary standard for the standardization of products that promotes rationalization and quality assurance in business and technology. Screws conforming to DIN standards can be found in ABC product brochures dating back to 1924.

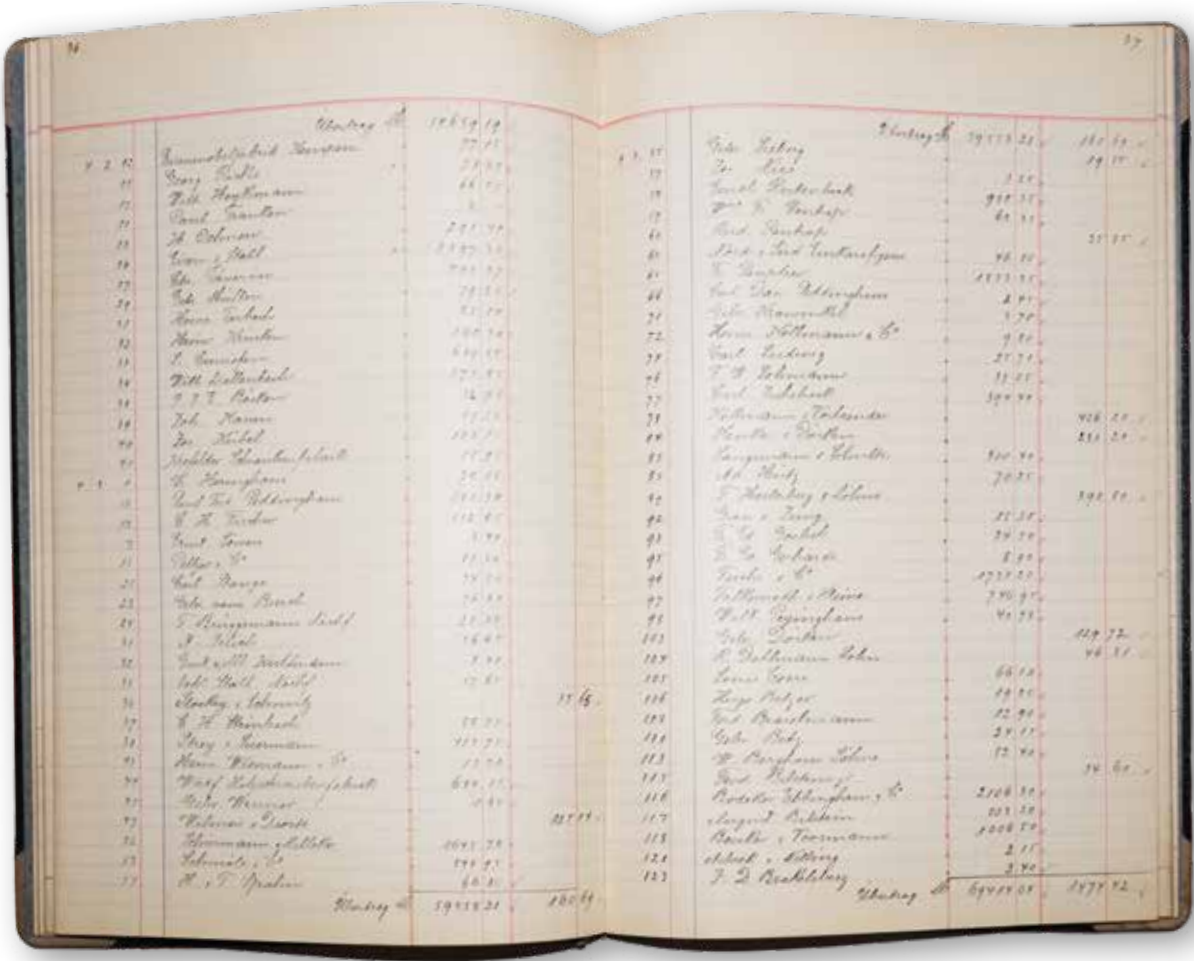


Since the 1860s, there have been disagreements about the standardization of screws and other industrial products. In 1917, the "German Industrial Standard", or DIN for short, came into being.

- Countersunk, half-round, slotted-head screws in iron according to DIN
- Countersunk, half-round, raised countersunk head screws in brass according to DIN
- Pan head screws according to DIN in iron and brass
- Flat nuts in iron and brass.”⁵

ABC Management

During World War I, the commercial management remained in the hands of Albert Wellershaus (1848-1921), assisted by his nephew Felix Wellershaus. Carl Robert Dicke (1857-1930) was in charge of the technical department. In the 1920s, the next generation joined the company. In 1921, 29-year-old Carl Dicke (1892-1974) joined ABC and was given power of attorney a year later. In 1924, he married his cousin Elisabeth (Liese) Dicke, and in 1930 their son Robert (1930-2005) was born – the same year Carl became the company's second managing director. His cousin Robert Dicke (1899-1977) joined the company in 1923 at the age of 25, married Margarete Vitense in 1924, and became technical manager of Plant I in 1930. The 31 year old Hermann Rocholl (1898-1960) started at ABC in 1929 - at that time he already had his 5 year old son Hermann Rocholl (1924-1971) – and one year later he became manager of Plant II.⁶



ABC financial statement book from the year 1927

Democratic revolution

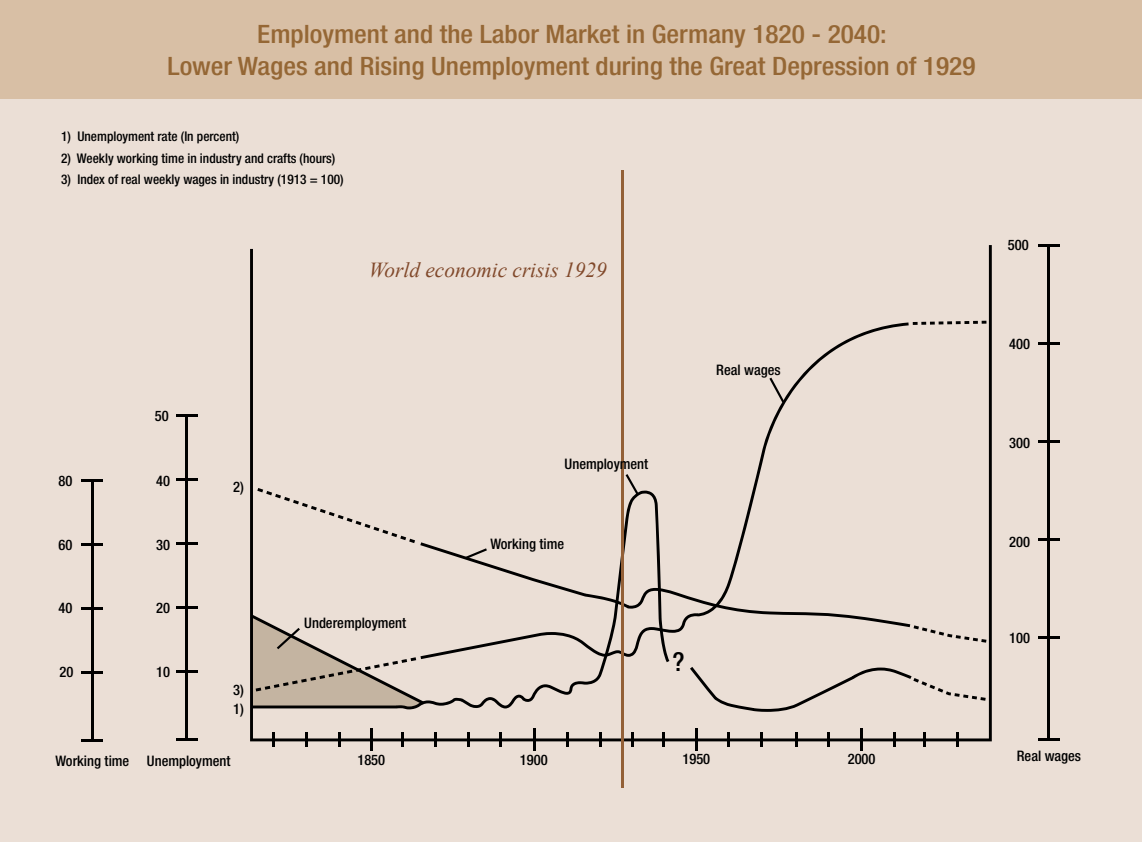
After the socialist revolution in Russia in 1917-18 with the overthrow and assassination of the Tsar, events in Germany also came to a head in early November 1918. There were uprisings of workers’ and soldiers’ councils, and on November 9, 1918, the end of the monarchy and the proclamation of the republic – always accompanied by fears of Russian-style radicalization. In December, it was decided to establish a parliamentary democracy. Outside the capital, Berlin, a national assembly convened in Weimar and, by May 1920, had drafted a democratic constitution for the German Empire, the Weimar Republic. After this democratic revolution, conservative-nationalist to fascist counter-movements soon formed.

Changed economic order

Ideas about the future economic order were quickly clarified because the unions now had an official representative function for workers. After only a few days of negotiations, the unions and employers’ associations signed a joint agreement on November 15, 1918. Among other things, the agreement limited the working day to eight hours, and companies with more than 50 employees had to allow workers’ committees – legally regulated as works councils from 1920 onwards. For companies, the new economic order meant an unusual shift in the balance of power. At ABC, too, workers’ interests were represented and working hours were reduced. In order to cope with the volume of production, the company applied to the council to increase the working hours of 69 workers to 9.5 hours Monday through Friday and 6.25 hours on Saturday. The request was approved.

Märkisch Employers’ Association

The Märkische Arbeitgeberverband [Märkisch Employers’ Association] was founded in 1919 to better represent the interests of employers in the new political and governmental constellation. The existing employers’ associations for the Schwelm and Hagen districts, which had existed since 1904, were merged into it. They now had official representation for further negotiations with the unions. The negotiations that followed dealt with working conditions, minimum wages, and the introduction of a paid vacation of three to six days. At the same time, the employers’ association tried to reintroduce piecework wages as before the war. However, it failed because of opposition from the unions.



Economic reorientation and decline

The war ended in 1918-19, but it left serious aftermath problems that led to further conflict and upheaval. Political, social, and economic problems came to a head – first the economic reorientation in the shadow of hyperinflation and reparation demands, and finally the economic decline framed by the Great Depression of 1929. Deflationary devaluation followed, bringing the economy to a partial standstill and creating unprecedented unemployment.

Changeful post-war years

In 1919-20, ABC experienced difficulties in obtaining raw materials, and machines had to be shut down on a regular basis. The good business situation clouded over temporarily, but stabilized again in 1921, and even brass screws, which had been out of production during the war, were produced again. The positive trend continued in 1922:

“As a result of the downright rush to buy in all types of screws, the demand in the raw material was considerably greater than last year.”7

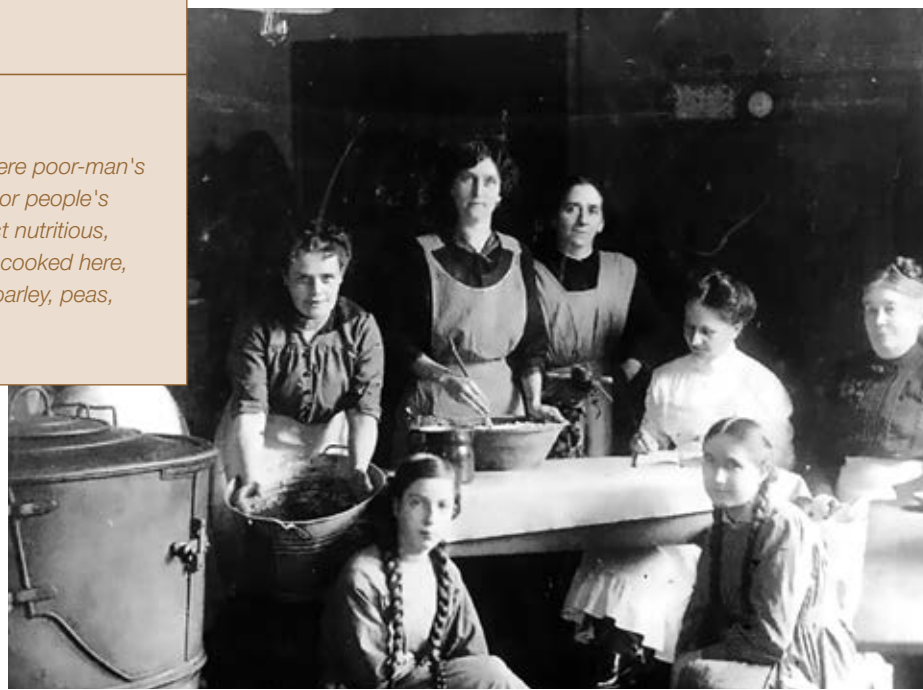
Washing and locker room of ABC around 1935

This was ABC's washing and locker room around 1935. The sinks were designed so that several people could wash at the same time, standing side by side.



People's kitchen around 1920

To alleviate the hardship, there were poor-man's meals- also called soup kitchens or people's kitchens. For the hungry, the most nutritious, inexpensive meals possible were cooked here, such as soups made from pearl barley, peas, potatoes or cabbage.



Between welfare and corporate interests

The situation of the workers during these years was turbulent and, in some cases, life-threatening. In this respect, ABC found itself economically and morally caught between the interests of the company and the welfare of the workers. This is illustrated by many of the company's decisions in the 1920s.

Voluntary contributions

In 1920, for example, land was purchased for the construction of more workers' housing, and in 1921 a new housing account was established to alleviate the housing shortage. Attention was paid:

“to what extent construction must be done so that the corporation is not required to contribute to housing purposes of the municipality.”⁸

ABC supported the People's Kitchen, founded by local factory owners in the 1920s, paying 1/5 of the total cost. Anniversary gifts were made, and the support fund, established in 1868, was converted into a foundation in 1919-20 to provide grants in the event of illness or death. For the Girls' Home, which housed young female workers from out of town with no family ties, ABC purchased a farm to provide for them.

Problems due to Ruhr occupation

ABC thought it was on the right track after the first years of the war and wanted to continue its pre-war development. But now the aftermath of the war began to cause problems. Because Germany was obligated to pay reparations for World War I and was behind on its payments, French and Belgian troops occupied parts of the Ruhr region from 1923 to 1925. For ABC, it was therefore *“no longer possible to obtain the required quantities of wire from Dortmund, Düsseldorf, Hamm and Langendreer as in the past.”⁹* The company had to find other wire suppliers, order foreign trucks, accept higher purchase prices, and sometimes get its wire from Czechoslovakia.

Ruhr occupation after the First World War: French troops in Essen in 1923



Lockouts & walkouts

At the same time, there were lockouts and walkouts in 1923-24, just as the company was celebrating its centennial. ABC decided to skip the centennial celebration because of the “*inconvenient timing*,” but paid the workers a bonus. A strike by the workers in November 1923 was settled by arbitration, and the company noted with relief, “*Since that time it has been considerable quieter at work*.” Following a decision by the employers’ association, the workforce was locked out for almost two months in 1924. There was also a partial shutdown for the installation of a new cylinder, and a two-week reduction in working hours in August due to a lack of orders.

Special edition of the SPD and union-affiliated newspaper Neue Freie Presse from 3/13/1920 with a call for a general strike

Workers at the time of the lockouts and strikes



Rising social security contributions as a problem

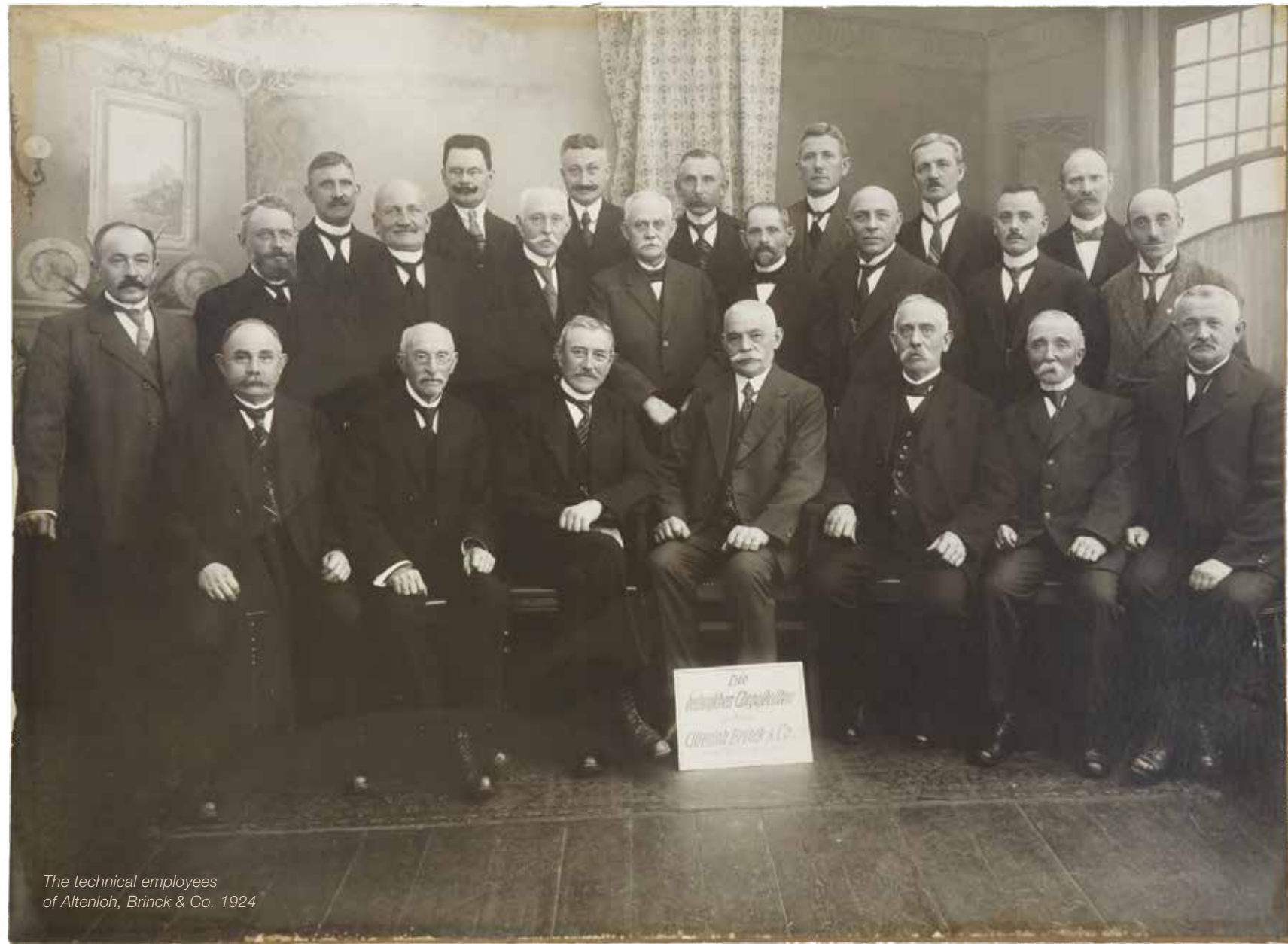
The negotiated social contributions for the workforce had risen by about 2/3 compared to pre-war levels. Faced with these cost increases, ABC was forced in 1924 to “*initiate the closure of the plant with the Trade Council, with the participation of the Works Council*.” There were layoffs, and jobs were not reinstated until May of the following year. Despite an unsatisfactory balance sheet, a dividend was paid, but the company’s situation was difficult.

Plant closures and decline in sales

Management was also very unhappy with the political situation and the customs and tax policies. The shortage of materials led to plant shutdowns, including an entire wood screw production hall. With rising costs, sales prices proved to be too low, ABC could almost only make a profit on iron screws, while the main product, wood screws – with a manufacturing share of 90% – and the complementary product, carriage bolts, were under severe cost pressure. ABC blamed foreign competition. The company itself exported about 25% of its main product, wood screws. However, total sales fell sharply by around 25%. Nevertheless, the dividend percentage did not change, remaining at the previous year’s level and only decreasing in amount.¹⁰



Accounting records at ABC from the 1920s onwards



The technical employees
of Altenloh, Brinck & Co. 1924

Investments in Plant II

Despite the difficult economic situation, ABC invested in the new production site in Gevelsberg, Germany, because it was there that the iron threaded screws were produced that were still profitable. In 1923, a forge was installed for the hot forming of raw screws – the production of cold formed screws and nuts and the thread rolling process had already started in 1915.

World market for wood screws emerges

By the 1920s, other fairly significant screw factories had been established abroad, particularly in Sweden and the USA. Although there was an international association of screw manufacturers, it was not possible to reach common agreements. As a result, there was overproduction on the world market, and for the German manufacturers this meant a decline in sales and a loss of jobs – also at ABC. The “*reorganization of the world economy*” after the First World War was seen as a major threat to the company’s own business activities. Manufacturers sought low prices and increased exports.

Wood Screw Association under pressure to change

The markets and the political and economic situation had changed so fundamentally that the Wood Screw Association, founded in 1905, had to be reorganized in the 1920s. Many members were dissatisfied, including Altenloh, Brinck & Co. There were many domestic companies that were classified as “*small and insignificant manufacturers*” but were believed to be undercutting prices. Foreign competition, however, was considered more dangerous. In search of “*cheaper production and better competitiveness,*” some wood screw manufacturers found the existing association too cumbersome and outdated.



ABC advertising poster
around 1930,
featuring the new
colors that also contains
the logo from 1920.

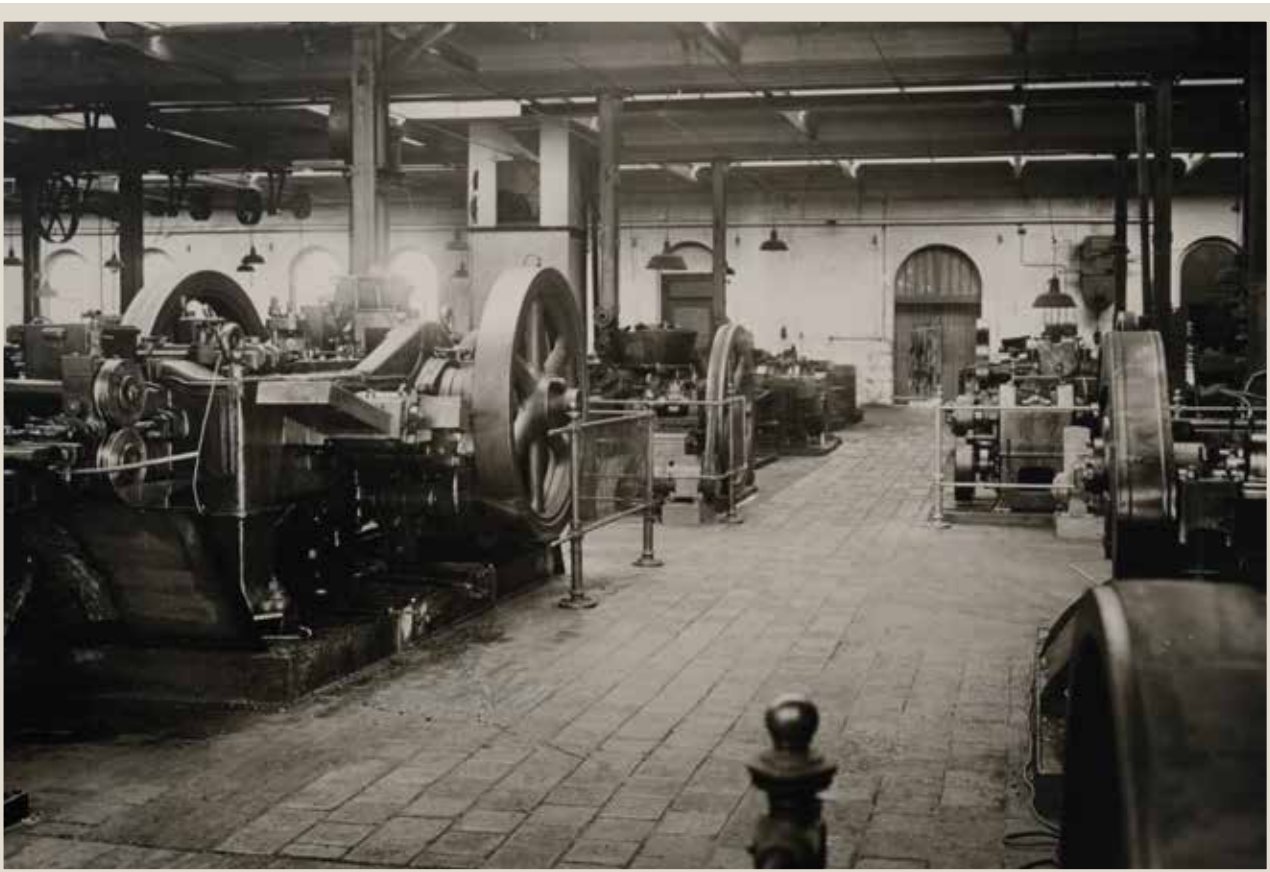
Goal: Increase the quota

ABC felt that increased sales were necessary to “*maintain our semi-skilled labor base on which a company of our kind stands or falls.*” It was feared and observed that if ABC itself could not produce and sell enough, “*skilled people*” would migrate to other industries. The company saw an urgent need to act, and threatened the association – now called a syndicate – with termination if its own quota was not increased. In 1926, ABC wrote to Ernst Falkenroth in Schwelm, chairman of the sales office of the German Wood Screw Manufacturers:

“The syndicate came into being and was built up on the basis of conditions which were authoritative before the war. However, the conditions in Germany and in the whole world have changed fundamentally since the war; what could be accepted as correct at that time is no longer applicable.”¹¹



ABC turning shop in the 1930s:
Production is electrified throughout, for lighting and machine drive alike.
It provides jobs for numerous people.



ABC press shop in the 1930s:
The pressing process is carried out by large flywheels, which are separated from the outside by protective grids to prevent accidents. The floor of the production hall is masonry to withstand the weight of the machine.

Overburdened cartel organization

As a compromise, the export division was removed from the quota system. In 1929, through the Wood Screw Association, ABC joined the “*Purchasing Association to Obtain Quotas.*” In 1930, ABC, along with Arnold, Boesner, and Schraubenwerk Neuss, bought out two competitors in order to increase its own sales quota in the association. However, this increased ABC’s inventory, which in turn prolonged the shutdown of production at the main plant. In 1932, ABC’s managing director, Felix Wellershaus, became chairman of the association, so that association matters could initially be discussed in advance in the company’s internal committees and coordinated with the company’s own interests. However, the dynamics of competition, inflation, strikes, lockouts, the Great Depression and the ensuing deflation made it increasingly difficult to regulate a cartel organization.

Dramatic economic situation - also at ABC

The increasingly dramatic economic situation was also reflected at ABC. In the year following the Great Depression of 1929, for the first time in years, no interim dividend was paid to shareholders.¹² The steady decline in sales, falling world market prices and the general erosion in prices led to a devaluation of inventories. In 1931, ABC increased local emergency aid to Ennepetal-Millspe. On December 30, 1931, the company laid off all foremen and employees at Plant I. Four months later, on April 28, 1932, another 314 were laid off at Plant II, and only 37 were rehired the following July. In 1932, ABC’s sales were down 31% from the previous year. A dividend to shareholders could only be paid from the reserve account and was cut to about 1/3.¹³

1933 - 1945:
In National Socialism
and the wartime economy
of World War II

Nazi propaganda from the Reichsautobahn construction

A visible key motif of the technology-enthusiastic Nazi propaganda was the construction of imperial highways. It was intended to show political drive, reduction of unemployment and the technical modernity of Germany. The image aesthetic was monumental, showing difficult construction situations or suggesting a harmonious embedding in the landscape – here the photo of a steep slope construction site in 1937.

Germany was in a dire economic, political, and social situation when Adolf Hitler, leader of the National Socialist German Workers' Party (NSDAP) founded in 1920, seized power on January 30, 1933. The coup leader with a criminal record, who modeled himself on the fascist Italian dictator Benito Mussolini, succeeded in effectively mobilizing the population *“for Führer, people and fatherland.”* On this basis, democracy was quickly transformed into a fascist-national socialist dictatorship through violations of the law, enforced conformity and terror, and finally World War II (1939-1945) began. Economic aspects played a central role in this process, which can also be seen at Altenloh, Brinck & Co.

Racism and economic imperialism

In the face of these shocks, imperialist and militarist fantasies of the grandeur of the defunct empire were revived, with the claim to world domination by the *“Aryan race.”* This was threatened by increasing economic globalization and the rapid rise of America with its model of liberal capitalist economic success. Based on racist ideas, their own economic imperialist goals were to win the economic competition and to counteract the *“international conspiracy of world Jewry”* – especially by colonizing land, depopulating and creating a blockade-proof Germanic resource and *“living space”* in Eastern Europe with the dimensions of the American continent.

Economic recovery as early as 1933

Given this outset, the will to rearm and prepare for war was the driving force behind Nazi economic policy. The economic upswing that had begun before 1933 was hardly used to improve the living conditions of the low-income classes, even though successful Nazi propaganda made it seem otherwise. On the contrary, income inequality and the proportion of the population with high incomes increased significantly between 1933 and 1939. The supposed Nazi economic miracle was quickly felt as a noticeable upturn in the economy – including at ABC, although the assessment in April 1933 was still wait-and-see:

“It is too early to say much about the new fiscal year, as business has been severely affected by the political unrest in the first few months. Further developments remain to be seen”¹

Positive annual result in 1933

In 1933, ABC's annual results were positive for the first time, with sales of wood screws increasing by 1/3 and sales of iron and brass threaded screws each increasing by 1/4. The working week at Plant I in Ennepetal-Milspe was increased to 45 hours throughout the year, and at Plant II in Gevelsberg from 37 to 48 hours. In the annual financial statements, management assessed the situation in this respect as a recognizable turnaround:

“Today we can say that the past fiscal year also brought the economic turnaround to our company. [...] We believe that the economic recovery that has begun will continue.”²

Tupo, the Screwman

In the same year, ABC tried to enter a completely new market segment: Tupo, the Screwman, was a new type of toy in the tinker box system, of which there were many at the time. ABC had acquired the license from the Gevelsberg company Artur Deichmann. But already in 1935 it turned out that Tupo was *“almost unsaleable.”*³ Tupo experienced a brief renaissance in 1941:

“Tupo the Screwman is now in demand almost daily due to the shortages in the toy market caused by the war situation.”⁴



Already since 1911 there were building set systems as technical occupation plays. In 1933, ABC also took up toys as an additional product idea: Tupo, the screwman. For ABC, this remained a temporary niche product.

Screws in thread rolling process

In the 1930s, ABC published a brochure describing its manufacturing processes and quality control. In particular, ABC claimed to be the “pioneer” in thread rolling, which was practiced by many screw manufacturers at the time and had been introduced at the Gevelsberg plant in 1915. With reference to a technical article in the VDI magazine dated April 11, 1931, ABC emphasizes this more economical method as follows:

“The rolled screw is equal to the cut one in all the minor stresses and strains.”5



Technical article about cold rolled screws.



ABC's first image brochure from the 1930s

Effective mobilization of population and economy

From the very beginning, National Socialism, with its rapidly growing apparatus of power, relied not only on the widespread mobilization of the population but also of the economy – and was effective and successful in both. Just one month after seizing power, on February 20, 1933, Hitler invited leading industrialists to a meeting at which he made clear his rejection of trade unions, the political left, democracy, and liberalism, and informed them of his economic plans. After the bad experiences of 14 years of democracy, Hitler's attitude and plans won over the business community as willing partners – and found an open ear among large sections of the population. After the crisis years, the business community also lacked the motivation to defend itself against the growing state interventionism from the right.

*March at the Brandenburg Gate in Berlin
on January 30, 1933*



Economic predicament and Nazi propaganda

With the prospect of future booty from abroad, the Nazi state led Germany into an economic predicament that became more acute in the face of the growing superiority of Western countries: massive investments in armaments for war preparation, foreign economic dependence, enormous foreign debt, dependence on foreign raw materials and food. Between 1933 and 1939, the share of the national income spent on armaments rose from one to 20 percent, making the resurgent German militarism proud. The Nazi government gave tax breaks, distributed social benefits, and made the economic recovery appear to be the result of good Nazi economic policy. This is reflected in the assessment of the ABC supervisory board in 1934:

“The creation of jobs in the areas of house and road construction, home repair, the revival of the furniture market due to the granting of matrimonial loans, the promotion of auto-mobile construction and all related industries brought increased sales opportunities for our products.”⁶

1934: Further improved business at ABC

Instead of growing economic difficulties, ABC was relieved to find that its business was growing in 1934. Sales of wood screws increased by 54% in volume and 58% in value. Working hours were increased to 49 or 50 hours per week, and employees were secure in their jobs. The dividend was increased, and ABC's supervisory board noted that the balance sheet showed an *“exceptionally favorable result.”⁷*

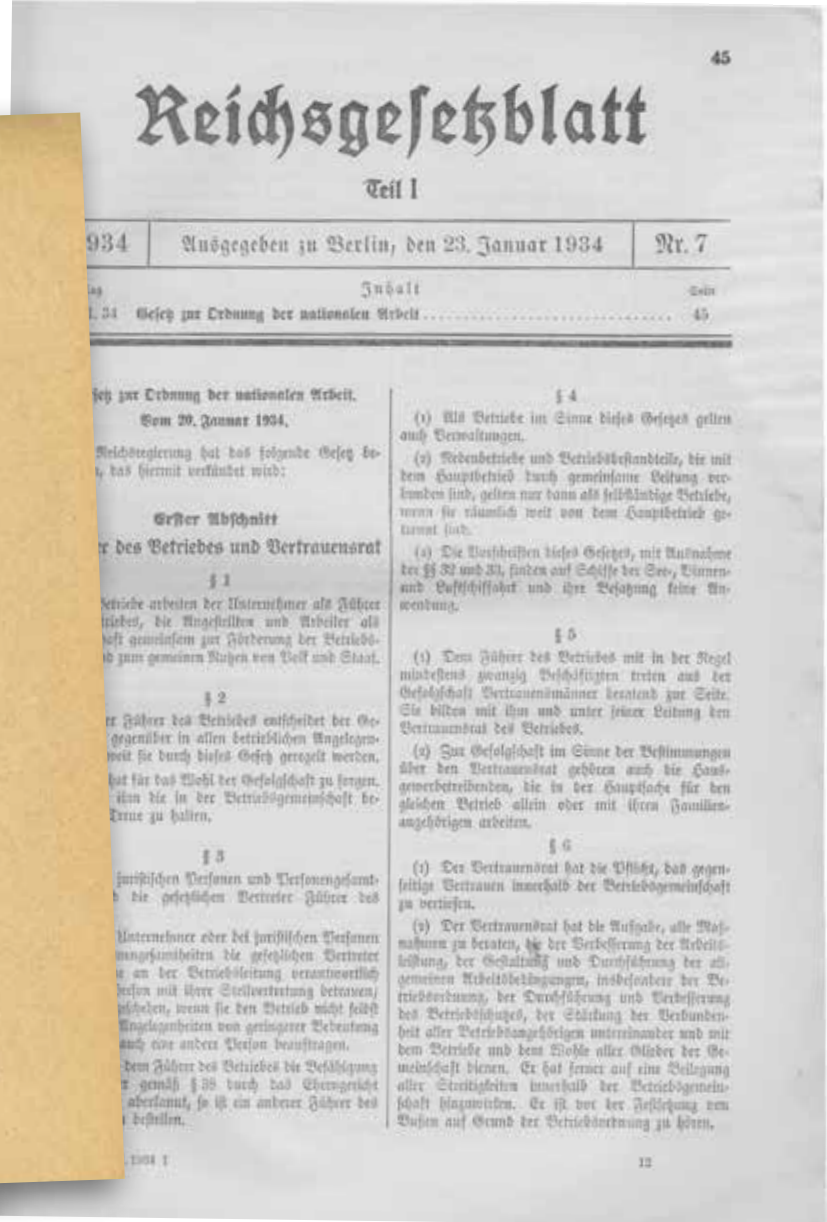
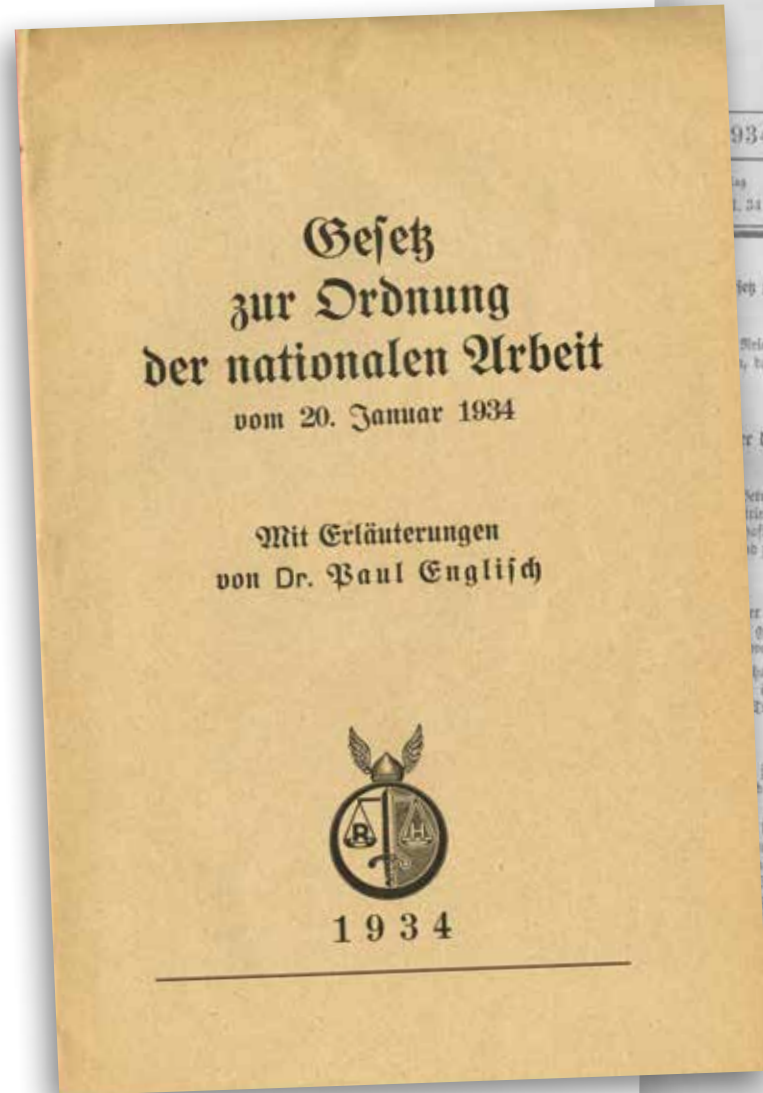
Once again voluntary contributions at ABC

With the improved economic situation, voluntary social spending for workers and the general public also resumed. There were subsidies for festive suits and hats, potato money, Christmas gifts and anniversary bonuses – as well as, in line with the new political framework, wage and festive expenses for the National Socialist Workers' Day on May 1 and support for the National Socialist winter relief program. The former girls' and workers' dormitory was converted into nine apartments for employees in 1933-34. ABC was particularly generous in its local involvement, donating a sports ground to the local gymnastics club.⁸

*In the course of the modernization of ABC
production and buildings,
in 1939 a building on Kölner Strasse was
converted into a staff house*



ABC um 1930



Law on the Order
of National Work
of January 20, 1934

Führer principle: Law on the Order of National Work
What sounds positive on the surface was already apparent to critical observers at the time: the mass mobilization for the “*national community*” and “*Führer*,” the increasing state interventionism from the right, and the Germanizing propaganda based on Nazi language were taking hold in the companies and in the minds of the people working there. An important step in this process was the “*Law on the Order of National Work*” of January 20, 1934, which introduced the Fuehrer principle into business, with the principles of “*Führer*,” “*followers*,” “*loyalty*,” and “*national community*” being propagated as “*Germanic*.” The entrepreneur became the “*leader of the operation*” and “*officer of the economy*,” the workforce his “*followers*,” and the worker the “*soldier of labor*.” They were all to be absorbed into the “*national community*” and bound to it with unconditional discipline and loyalty. Critics such as the German-Jewish literary scholar Victor Klemperer (1881-1960) saw through the propaganda language:

*“What touched me anew every day [...] was the word ‘allegiance.’ The whole emotional mendacity of Nazism, the whole mortal sin of consciously lying about things in the sphere of feelings that are subordinate to reason, and of consciously distorting them under the protection of sentimental obfuscation. [...] Following! Who were the people who stood together there in truth? They were workers and employees who fulfilled certain duties in exchange for a certain remuneration. [...] And now, in the hall of allegiance, they were [...] costumed and transformed by a single word [...]. What does a perfect follower do? It no longer thinks, it no longer feels – it follows.”*⁹

Allegiance and militarization also at ABC
The ideological change of concepts, the mobilization for “*Führer*” and “*national community*”, as well as the increasing militarization can also be found in ABC, for example in the annual report of 1936:

*“The development of the economy and of our company since Adolf Hitler came to power is a testimony to a unified and purposeful political leadership.”*¹⁰

The introduction of compulsory military service was welcomed in ABC’s annual report, which explained that ABC had carried out conversions and new buildings “*in the interest of creating jobs*” and had “*built air-raid shelters in accordance with existing regulations*.” Entrepreneurs, too, had to be careful not to become the target of the Nazis’ sharp criticism of liberal capitalism, branded as “*Jewish*,” in which one was an antisocial “*greedy*,” “*selfish*,” “*usurer*” who did not fulfill the obligations of the National Socialist leadership. It therefore seemed advisable to follow the goals and terminology of the Nazi dictatorship, as did most companies and ABC. This led to the dutiful and formulaic recurrence of relevant formulations in the accounts, here, for example, in the minutes of ABC’s Supervisory Board of July 27, 1934, the statement of which is repeated almost verbatim in the 1936 annual report:

*“In cooperation with the German Labor Front, roll calls and comradeship evenings [were] held to deepen the understanding of community work and to cultivate a sense of cooperation among all in the company.”*¹¹

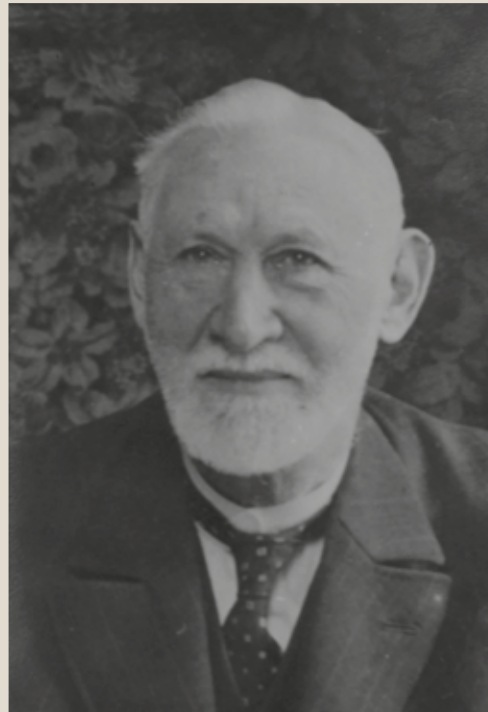


ABC workforce in the 1930s





Felix Wellershaus (1871-1939),
Neffe des Kaufmännischen Leiters von ABC
Albert Wellershaus (1848-1921);
Eintritt bei ABC 1895, Prokurist seit 1903,
stellvertretender Geschäftsführer ab 1920



Eugen Dicke (1860-1945),
ab 1906 Mitglied des ABC-Aufsichtsrats,
von 1918 bis 1920 stellvertretender Vorsitzender
und 1934 bis 1945 Vorsitzender

Enforced conformity of the economy

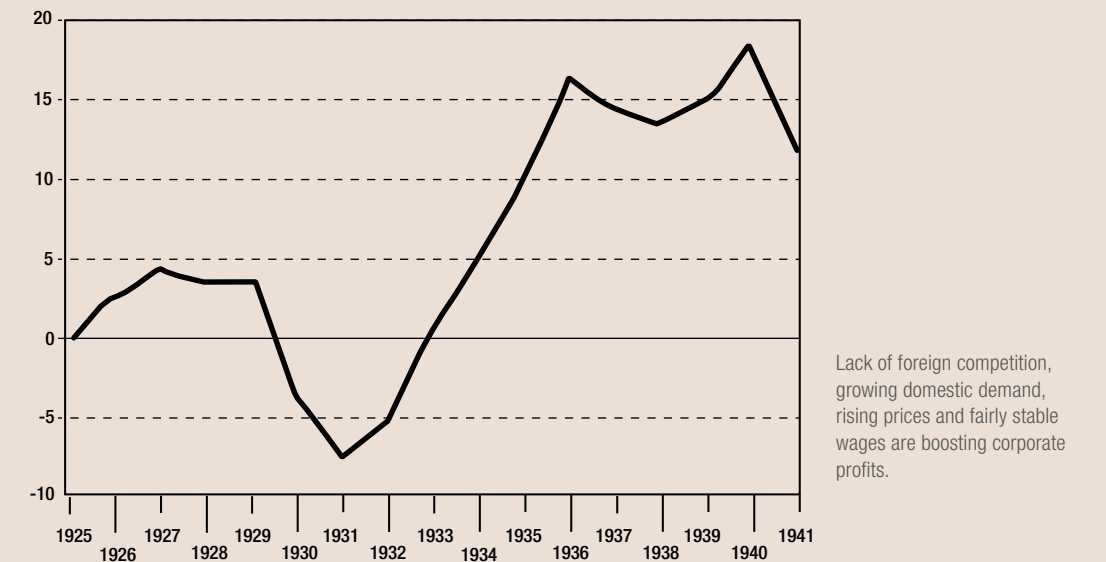
The “*German Labor Front*,” with which ABC cooperated, was founded on May 10, 1933, after the free trade unions had been crushed. The law of 1934 brought the economy into line, i.e., organizational forms such as works councils, trade unions or employers’ associations were abolished and incorporated into the Nazi organization. The Märkisch Employers’ Association was also liquidated. The German Labor Front, a unified Nazi organization, was supposed to resolve the conflicting interests of employers and employees. With the enforced conformity of the economy, Hitler had fulfilled his announcement of February 1933.

Successful year 1936

Germany’s economy continued to improve in 1936, but the Nazi-controlled environment made it almost impossible for companies not to make a profit. ABC was no exception. In 1936, the company’s sales increased by more than 30 percent, with the exception of wood screws, which were discounted in order to discourage sales by non-ABC suppliers. Both ABC plants were once again operating “*at full capacity*.” Net income increased significantly. By converting to a limited partnership, the company was also able to save on corporate taxes. ABC proved to be a good, creative, non- “*greedy*” company of the “*national community*”

and donated to a memorial, the Nazi administration building and the Nazi Winter Relief Aid. Workers who had been with the company for more than 25 years received a bonus. In addition, ABC subsidized the trip of 60 workers to the Nazi cultural and recreational organization “*Kraft durch Freude*,” [*Strength through Joy*] a sub-organization of the “*German Labor Front*.”¹²

Nazi Economic Policy Promotes Profits: Return on Capital of German Industry 1925 - 1941





Hermann Rocholl (1867-1945),
member of the ABC Supervisory Board
from 1917 and deputy chairman
from 1934 to 1945

Composition of ABC's Supervisory Board

In 1936, all five founding families of Altenloh, Brinck & Co were still represented on the Supervisory Board with a total of nine descendants. The Riecke family was represented by 69-year-old Hermann Rocholl (1867-1945) and 38-year-old Hermann Rocholl (1898-1960), while the Brinck family was represented by 47-year-old Hans Rittershaus (1889-1979). Theodor Altenloh's family was represented by 53-year-old Theo Peddinghaus (1883-1961) and Daniel Altenloh's family by 44-year-old Carl Dicke (1892-1974), 76-year-old Eugen Dicke (1860-1945) and 37-year-old Robert Dicke (1899-1977). The Wellershaus family was represented by 65-year-old Felix Wellershaus (1871-1939), who was followed by his nephew Georg Wellershaus (1905-1974), and 36-year-old Kurt Wellershaus (1900-1978), Felix Wellershaus' son. The minutes of the Supervisory Board meetings show that the members of the Supervisory Board were well informed in the most important discussions of the period 1936-1953 and supported the decisions of the management.¹³

ABC benefits from four-year plan

In 1937, ABC experienced difficulties in obtaining materials, but this changed the following year. The mobilization and militarization of the population had progressed so far that Hitler now publicly announced the goal of making the German economy self-sufficient and ready for war with a four-year plan. This had a positive effect on ABC: While other companies in the small iron industry had to make do with an allocation of about 50% of the iron quota, ABC was able to increase its quota for raw screws to about 120% and for wood screws to as much as 150%. The company's management noted with satisfaction:

“The increasing demand of public consumers, such as the Wehrmacht, the Reichsbahn, etc., the implementation of major construction projects under the four-year plan, and the expansion of the armaments industry necessitated state intervention in the iron market and strict quota control.”¹⁴

Modernization from 1937/38

With some of the buildings at Plant I in Ennepetal-Milspe dating back to the company's early years, ABC was again planning to modernize the facility because the buildings no longer met *“technical and hygienic”* requirements. For this purpose, the reserve account was increased. In the next few years, more floors were to be added to the old warehouse building, a replacement for older parts of the building was to be constructed, the locksmith's shop was to be rebuilt, and further electrification was to be carried out. Technically, the company was also interested in the latest developments. The managing directors Robert Dicke and Hermann Rocholl visited the English screw factory Nettlefolds in Birmingham to learn about their new manufacturing methods.

System-compliant in social benefits

In addition, ABC sought to be a good employer according to Nazi guidelines. In 1937-38, the company made voluntary contributions to cover the costs of wages and festivities for the Nazi Labor Day, trips with the Nazi organization *“Strength through Joy,”* and comradeship evenings. A house was purchased especially for the company's own *“followers”* and adapted to their needs – with recreation rooms, a reading room, shower cabins, a lounge area, a bowling alley, a small-caliber shooting range, and a large hall *“for community events.”* The wording again expresses the company's concern to conform to the system:

“In addition to creating better workplaces, our concern is to organize the leisure time of our employees. For example, the current unfavorable space conditions at our Milsper plant force workers to spend their breaks between machines.”¹⁵



Garden area on the ABC company
grounds of Plant II directly on the
Ennepe river

Welcoming the annexation of Austria

In March 1938, Austria was annexed by the Nazi state, which was not only favored in Germany, but also by large parts of the Austrian population. ABC was also pleased and expected to profit from Austria's mineral resources:

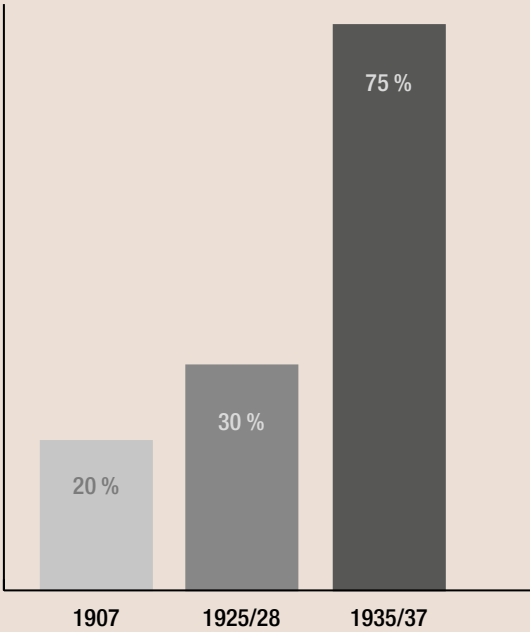
“We do not wish to close our report without mentioning the last great deed of the Führer, the annexation of Austria to the German motherland.”¹⁶

Nazi cartel policy and screw associations

Not only were existing cartels encouraged by Nazi economic policy, but forced cartels were created under the supervision of the Reich Ministry of Economics. Between 1933 and 1935, there were 120 forced mergers and 1,600 voluntary cartels, including the Wood Screw Association, of which ABC had been a member since its founding. By 1936, the Wood Screw Association was doing so well that a special dividend was paid to its members. In 1938, ABC also became a member of the Trade Screw Association. The re-establishment of an international association of manufacturers, however, was *“out of the question at the present time because of the troubled world economic situation.”¹⁷* The focus was on the German market and a joint test center was established:

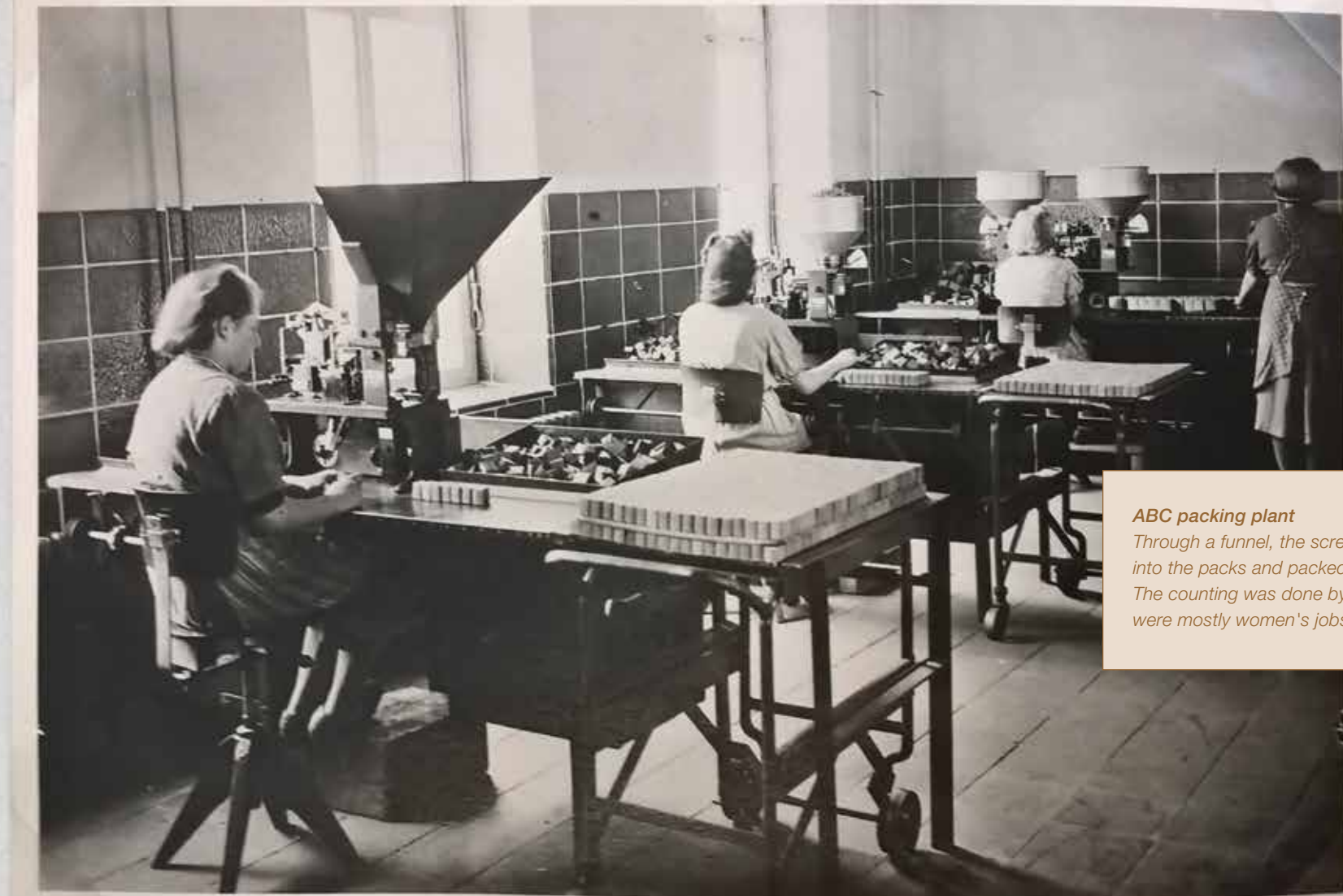
“The management of the Wood Screw Association has proposed the establishment of a test center to carry out joint technical tests. The association’s Neuss plant will set up such a test center together with the Boesner company.”¹⁸

**Iron and steel products sector in Germany:
Share of production accounted for by companies
organized in cartels 1907 -1935/37**



ABC Production

Internal transport conveyors at ABC, suspended with buckets and roller conveyors for crates.



ABC packing plant

Through a funnel, the screws are filled into the packs and packed for shipment. The counting was done by hand. These were mostly women's jobs.

Nazi expansion policy and the Wood Screw Association

When German troops marched into the border region south of Saxony and Silesia, the so-called “*Sudetenland*,” on October 1, 1938, the aryization of companies began in early November 1938. After this land grab, the Wood Screw Association took over an efficient wood screw factory in Saaz, now Zatec in the Czech Republic, some 500 kilometers to the east.¹⁹

Good ABC order situation due to Wehrmacht

In 1939, ABC installed a gas generator system in Plant II to heat the furnaces in the forge and anneal the cold-pressed bolts. On September 1, 1939, the Second World War began with Adolf Hitler's invasion of Poland. The military finally became ABC's largest customer – initially for screws, as noted in the minutes of the Supervisory Board for that year:

*“The order backlog remains good. By far the largest part of the screw deliveries are destined for the Wehrmacht and its customers.”*²⁰

With the attack on the Soviet Union on June 22, 1941, the second phase of the war began. Now ABC was to work directly for the Luftwaffe's armament program:

*“Due to the imminent inclusion of our company in the Air Force program, the future support of our company by the Dortmund Armament Command will in all likelihood also come to an end.”*²¹

Further increase in orders due to war

The big turning point in the war was the battle for Moscow in 1941-42 and the futile attack on Stalingrad from the fall of 1942. This had an effect on ABC as well. Orders received in the first quarter of 1942 were “*even higher than in 1941*” because of the Wehrmacht's high demand. Inventories of finished goods had declined sharply because of the “*enormous and urgent needs of the Wehrmacht.*”



Household boxes with screws for distribution through the hardware store, which served the purely private demand

ABC's leadership active on Nazi orders

From May to July 1940, the Wehrmacht occupied Belgium and northern France. At the instigation of the military commanders, ABC directors Kurt Wellershaus and Robert Dicke visited Belgian and northern French wood screw factories in 1942. As a result, the Reich Minister of Armaments and Munitions appointed both to management positions: Robert Dicke as head of the wood screw subgroup and Kurt Wellershaus as head of the order control office. Robert Dicke then inspected 20 German wood screw factories for their economic efficiency.²³

Nazi Ideology: Of Labor and Forced Labor

In National Socialism, work was central from the very beginning, serving to enhance the self-esteem of “*German work*” by “*creative Germans*” – whether in the NSDAP or on National Socialist Labor Day on May 1. Conversely, work was used to devalue, exploit, exclude, or even destroy the “*work-shy*,” the “*asocial*,” the “*non-Aryan*,” or the “*greedy Jews*.” As more than 13 million German men were called up as soldiers during the war, attempts were made to make up for the lack of manpower with non-German forced laborers deported from other countries. In 1944, there were almost 9 million of them, making up almost 1/4 of the German labor force, including prisoners of war, but still a good 80% of them were civilians. This means that without forced labor, many companies would not have been able to continue production and would have been confiscated or placed under other management.

1946 - 1966:
Post-war period

Poverty, hunger and destruction

In large parts of Germany, the situation after the end of the war poverty, hunger and destruction.

On average, 18% of the housing stock was destroyed. In cities like Hanau, Bocholt, Paderborn or Düren up to 99%, Ennepetal-Milspe and surrounding villages, on the other hand, remained largely intact.



At the end of the war, Germany's economic predicament became fully apparent. Without the exploitation of conquered territories, the country experienced wartime food shortages, the extent of which was drastically felt by the population by the end of the war. Of the required daily rations of 2,200 calories for women and 2,700 calories for men, agriculture in the British occupation zone, where ABC was located, could produce only 400 calories. Starvation was averted only by Allied supplies and strict rationing. It was not until the end of 1948 that supplies returned to an acceptable level.

Gloomy economic outlook

The influx of displaced persons and refugees from the former German eastern territories exacerbated the difficult situation in the three western occupation zones: By 1950, the population there had increased by 24 percent. The division of the country into four occupation zones made economic trade much more difficult. In addition, the infrastructure in large parts of Germany was destroyed. Because of the enormous damage to urban housing stock, economic production potential, and dismantling, reconstruction seemed unattainable.

ABC: Difficult business situation in the post-war period

At the end of the war, many companies lacked the money with which Nazi economic policy had fueled the armaments industry. ABC was no exception. Although production had resumed, the sales situation was unfavorable. The number of employees dropped to 467 at the end of the fiscal year 1946. Working hours were reduced, resulting in a loss of wages for the workforce. Looking back on this first post-war fiscal year, the shareholders noted:

“So we have the paradox of an economy that flourishes in times of war and declines in times of peace, rather than the other way around.”¹

Liabile shareholders at ABC

The personally liable shareholders in the post-war order of 1946 were four descendants of the founders of ABC. These were the 54-year-old Carl Dicke (1892-1974), a great-grandson of the founder Daniel Altenloh, who had been married to his cousin Elisabeth Dicke (1887-1980) since 1924 – their son Robert Dicke (1930-2005), the later managing director of ABC, was 16 years old at the time. The 49-year-old Robert Dicke (1899-1977), Elisabeth Dicke's younger brother, came from the same family. The 61-year-old Kurt Wellershaus (1900-1978) was a great-great-grandson of co-founder Johann Christoph Wellershaus. The 48-year-old Hermann Rocholl (1898-1960) represented the Riecke family.



The Occupation from 1945 to 1949 in Postwar Germany

From ABC Supervisory Board to Advisory Board

Since its reorganization as a limited liability company in 1895, ABC has had a five-member “Supervisory Board” on which each of the founding families is represented. Since 1948, these have been Theodor Peddinghaus (1883-1961), 65, as chairman for the Theodor Altenloh family, Hans Rittershaus (1889-1979), 59, as deputy chairman for the Brinck family, Carl Dicke (1892-1974), 56, for the Daniel Altenloh family, Georg Wellershaus (1905-1974), 43, for the Wellershaus family, and Ludwig Schaafhausen († 1969) for the Riecke family. In 1957, the Articles of Association were amended to change the name of the “*Supervisory Board*” to “*Advisory Board*.” After 1960, new members of the Advisory Board were gradually added.²

U.S. decision for Germany’s reconstruction in 1947

The socialist ideal of the state in the sphere of influence of the Soviet Union was understood as a people’s democracy under the dominance of a left-wing party based on a socialist plan-based economy; the bourgeois ideal of the state in the West was understood as a pluralist party democracy based on a market economy. The new U.S. Secretary of State, George C. Marshall, wanted to prevent West Germany from falling under Communist or Soviet influence through a paralyzing crisis and declared his support for an industrialized Germany. In June 1947, he announced a massive reconstruction program for West Germany. The reconstruction of West Germany was to become the core and lever of European reconstruction, helping Europe to integrate largely on its own into an American-dominated world economy. In East Germany, on the other hand, a socialist plan-based economy was implemented.



Psychologically, the help with the German reconstruction through the Marshall Plan was very important. But how significant it was for the economic development was, is controversial today.

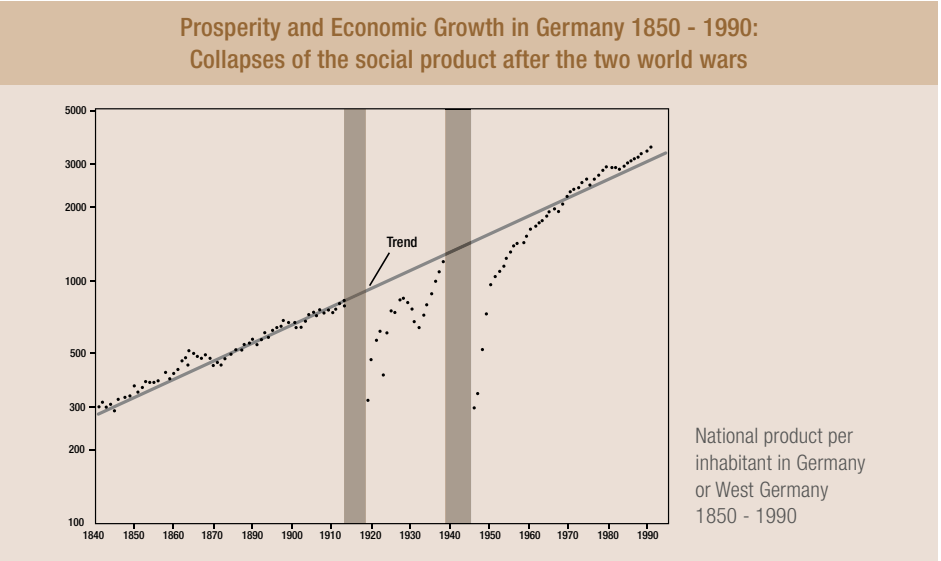


Economic catch-up process begins

The three western occupation zones became the Federal Republic of Germany, founded on May 23, 1949. The currency reform, planned by the U.S. occupation force as early as August 1946, was implemented on June 20, 1948, followed by the liberalization of prices. This marked the beginning of an economic catch-up process that led to two decades of rapid economic growth, also known as the “*economic miracle*.” This led to rising prosperity and consumption, and the transition from high unemployment to full employment from 1960 onwards. As early as 1947, the improved outlook was felt at ABC, and the company was again able to pay a Christmas bonus. For its 125th anniversary in 1948, the company designed a commemorative publication and held a company party as an expression of “*normalcy*” and confidence after the turbulent years.³



ABC celebrated its 125th company anniversary in 1948



Revival of collective bargaining partnership

Even before the end of World War II, trade unions were re-established with the permission of the Allies. In the early post-war years, entrepreneurs lobbied for the reestablishment of employers' associations. By 1948, collective bargaining was once again possible, as it had been in the Weimar Republic. Wages and working conditions were again agreed autonomously between employers' and employees' organizations as collective bargaining partners.

Reactivation of the Märkisch Employers' Association

Two ABC shareholders were involved in the reactivation of the Märkisch Employers' Association and attended the founding meeting a few weeks after the currency reform: 51-year-old Hermann Rocholl (1898-1960), managing director of ABC and great-great-grandson of ABC's founder Riecke, and 54-year-old Hans Carl Bilstein (1894-1970), entrepreneur from Altenvoerde and great-grandson of ABC's founder Theodor Altenloh. Their goal was to reorient themselves as early as possible to take advantage of the new economic opportunities. Both became members of the 5-member provisional board of the association, which was initially called the *“Hagen-Ennepe-Ruhr Employers' Association.”* Bilstein was elected as the first chairman.⁴



Hermann Rocholl

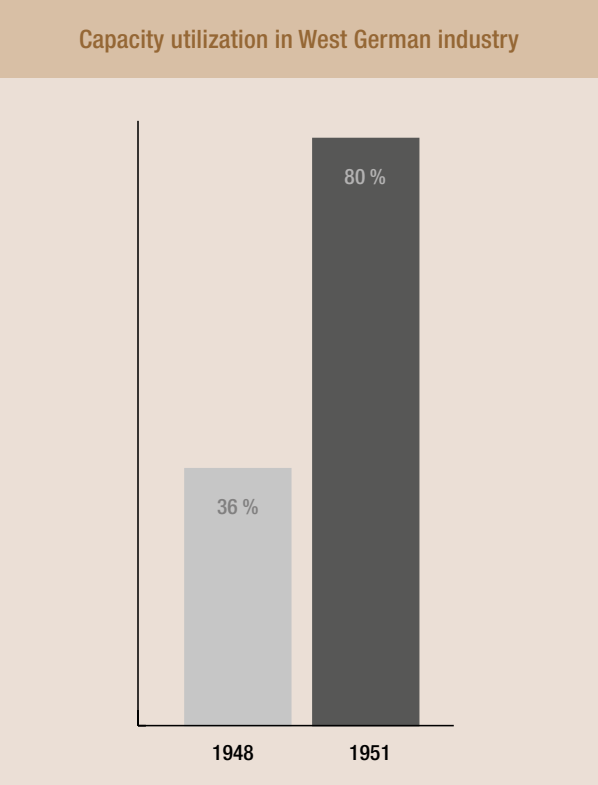


Hans Bilstein

Hermann Rocholl (1898-1960) and Hans Bilstein (1894-1970) were committed to the revival of the Märkischer Arbeitgeberverband in the post-war period.

Capacity utilization in West German industry increases

Once the postwar course was set, capacity utilization in West German industry rose. While it was 36 percent in the first half of 1948, it rose to 51 percent in the second half and was over 80 percent in 1951. The war between North and South Korea and their allies from 1950 to 1953 caused foreign demand to rise sharply, stimulating the German economy.



The new prosperity

The 1950s and 1960s saw the growth of the prosperity in Germany quickly, virtually like a “economic miracle”. The epitome of this was having one’s own small family, fashionable clothes in the style of the new era and the first television set. Economic historians, on the other hand, explain the development today as a fairly normal economic catch-up process.



ABC response letter to a customer:
Supply problems due to shortage of raw materials 1951



ABC management of the 1950s

For a long time, it was common practice at ABC to divide management among several shoulders. Representatives of the various founding families were usually active. For a long time, the families covered the necessary competencies from their own ranks. It was not until the 1960s that the company was managed by a single representative. This photo from the 1950s shows the people in charge at the time: Robert Dicke (1899-1977), Carl Dicke (1892-1974), Hermann Rocholl (1898-1960), Kurt Wellershaus (1900-1978).

ABC: Stormy demand due to Korean War

ABC also benefited from the improving economy. The company's 1951 annual report noted that the Korean War had created a "stormy demand for goods of all kinds, including screws." The supply of raw materials, however, proved difficult. Some wire suppliers preferred to sell overseas rather than serve the domestic market. In addition, prices rose in all areas.⁵

Upward trend with short dips

In the years that followed, ABC continued to grow, with only minor setbacks at times. In 1954, the company entered new markets in the United States and Canada. The 1955 annual report stated:

*"The past fiscal year was the first year since the end of the war in which our two plants were equally busy from the first day to the last."*⁶

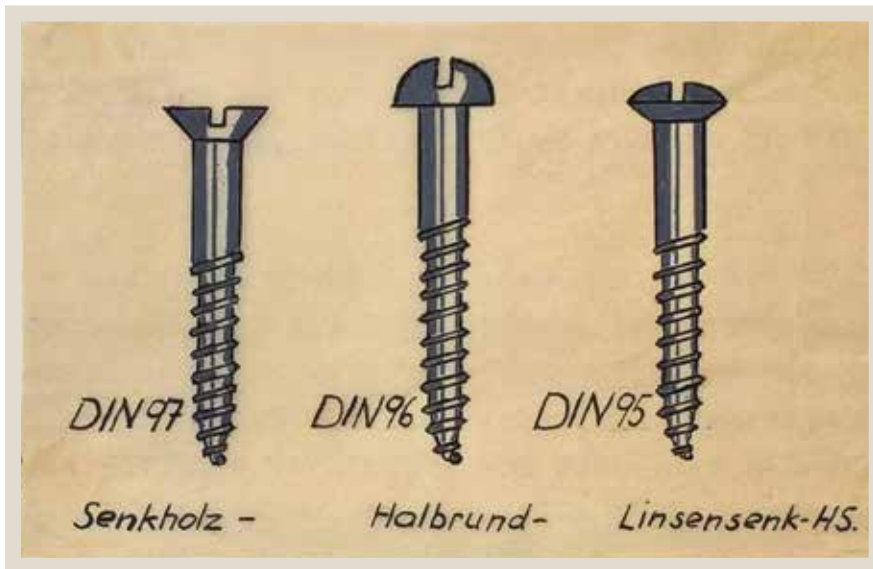
In 1957, ABC benefited from an economic depression in the U.S., but faced stiff competition in other export markets. The following year, pricing pressures increased, but ABC was still able to match the previous year's sales. By the early 1960s, demand was growing steadily and the company was doing well.⁷

1950: ABC logo turns green

Three decades after its first modernization, ABC's logo, the arched triangle, was redesigned. The color scheme was further reduced to two colors. The signal red gave way to the green that is still characteristic today, the typical color of most screw machines. The shadowy appearance of the frame was changed to a double line. In keeping with the style of the time, the ornamental strokes at the beginning and end of the letters, the serifs, returned in the initials.



ABC self-tapping stone thread screw advertising



Emerging Japanese competition

While business was generally good, ABC began to feel the effects of growing Japanese competition in the international wood screw trade in 1955. Prices were undercut and markets east of India were conquered by competitors. In addition, the use of plastics in various applications increased, reducing the need for wood screws. ABC countered the overcapacity – as it had done since the 19th century – by buying up wood screw factories.⁸

Agreement with Japanese competition

As competition in export markets increased over the years, ABC joined an export cartel in 1958 and agreed to a “common basic price list.” The following year, the company received a delegation from its Japanese competitors and participated in negotiations with the Wood Screw Union in Paris. Subsequently, ABC’s managing director, Hermann Rocholl, traveled to Japan and, in talks with the Japanese government, succeeded in having the European market respected while other markets remained in conflict. In the early 1960s, an agreement was reached with the Japanese competition, which was contractually secured as a quota for the European market.⁹

Room for a sales meeting in the 1950s – with the company brochures on the table, the products in the background and cigars, matches as well as ashtrays for a technical discussion in the style of the time.



Modernization of manufacturing

ABC’s rebuilding and streamlining efforts had stalled during World War II. In 1954, ABC picked up where it had left off: With the help of its “own well-equipped locksmith’s shop,” the entire machine park was overhauled to ensure operational readiness. Internal rebuilding and modifications were also resumed. Two years later, ABC was testing new equipment in the machine shop and attending the machine tool shows in Hanover and London. In 1957, the company established its own wire drawing shop at Plant I, which made raw materials less expensive. At Plant II, ABC built a multi-story addition to house the tool shop, locksmith shop, and laboratory. In 1962, a large warehouse and a new locksmith shop were added. Well equipped, ABC celebrated the 50th anniversary of the Gevelsberg site in 1963. In Plant I, new renovations provided better lighting and airflow conditions.¹⁰



ABC screws from the 1950s, carefully stored in an ABC bag, as they were sent along to a customer as a display object

Innovations in Plant II

Starting in the late 1950s, innovations in products and manufacturing began to be introduced, with Plant II leading the way. In 1958, production of ABC’s proprietary high-strength socket head screws began:

“At the Gevelsberg plant, production of a new article, high-strength grade 8 G hexagon socket head screws, was started. Extensive tests on rational production in perfect execution on a multi-stage press have led to a satisfactory result.”

From 1960, the production range was extended to include drawing screws and, in order to utilize capacity, special cold-formed parts. In 1961, ABC applied for another patent, number 1 195 263, for a special device for the production of wood screws. It was used to produce wood screws from preformed blanks with the diameter of the threaded shank part reduced. The patent specification named Karl Dürholt, an ABC employee from Gevelsberg, Germany, as the inventor.¹¹

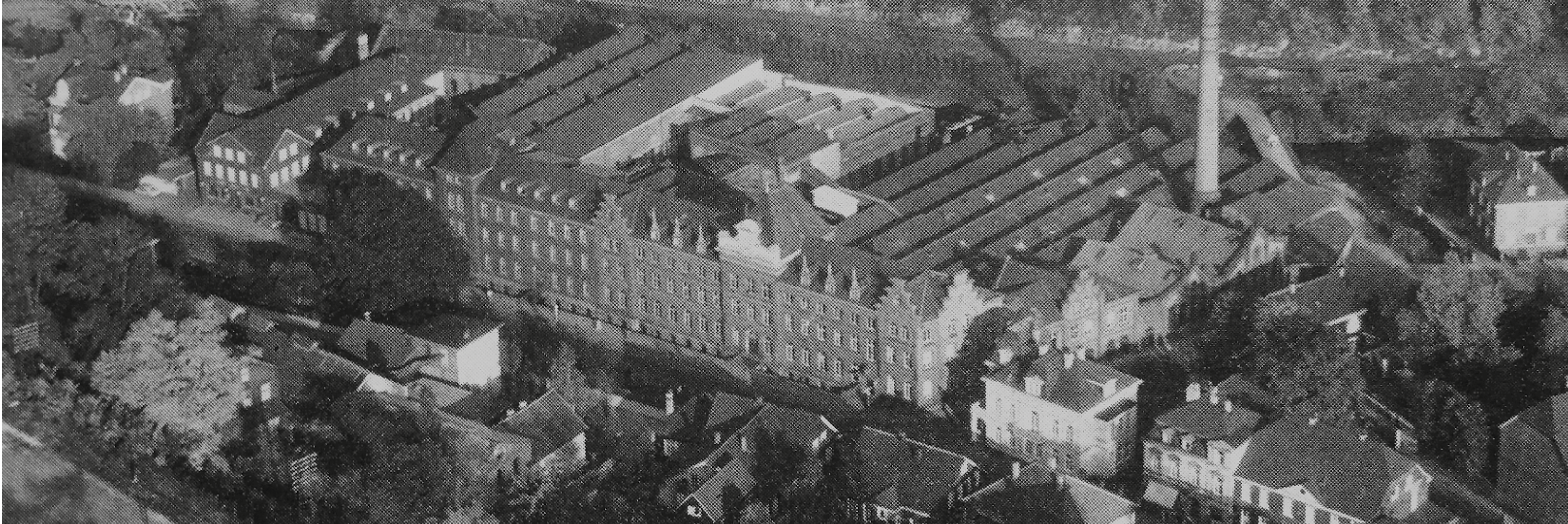


ABC patent specification from 1961

Growing workforce and labor shortage

After the first post-war years, the number of employees increased again – from 1950 to 1960, the workforce grew by more than 20% from 467 to 572 employees. The full employment of the entire German labor market in the 1960s also made itself felt at ABC. As early as 1959, the company assessed the situation as tense, and by the following year it was complaining of a shortage of workers in view of the continuing positive economic situation. ABC was competing with the automotive and electrical industries for workers and had to look for new opportunities. In the following years, automation and mechanization led to an ever-increasing demand for skilled workers.¹²

ABC factory view around 1960



Recruitment agreements of the Federal Republic of Germany 1955-1968



Recruitment agreements of the Federal Republic in Southern Europe and countries bordering the Mediterranean Sea: 1955 Italy, 1960 Spain and Greece, 1961 Turkey, 1963 Morocco, 1964 Portugal, 1965 Tunisia, 1968 Yugoslavia

“Guest workers,” also at ABC

To meet the labor needs of the booming economy, the Federal Republic of Germany began recruiting foreign job seekers – from Italy, then from Spain, Greece, Turkey, Portugal, and Yugoslavia – as early as 1955. They were called “*guest workers*” because it was assumed that their stay in Germany would be temporary. From 1960 to 1973, their share of the total workforce rose from 1.4 percent to 10.8 percent. ABC welcomed the first six Greek workers in 1961 and set up a communal apartment for them.¹³ Subsequently, it became a matter of course for people from almost all Southern European countries to find work and a second home with Altenloh, Brinck & Co.



Workers from countries bordering the Mediterranean came to Germany from 1955 – here Spanish female workers



Accommodation for the six Greek female workers of ABC 1961



Social market economy

In German economic history, the first insurance schemes for workers against social and existential risks have a tradition that goes back to the early industrialization – starting with health insurance, disability insurance, widows’ and orphans’ funds, and accident insurance. In the 19th century, some of these were transformed into a statutory social security system. In comparison with liberal capitalism in the United Kingdom or the United States, the German production regime was also characterized by a greater degree of state regulation to achieve social goals and, above all, social security. On this basis, an economic order was developed from the 1950s onward that was based on capitalist competition but assigned to the state the task of making socio-political corrections and working toward social equilibrium: the social market economy.

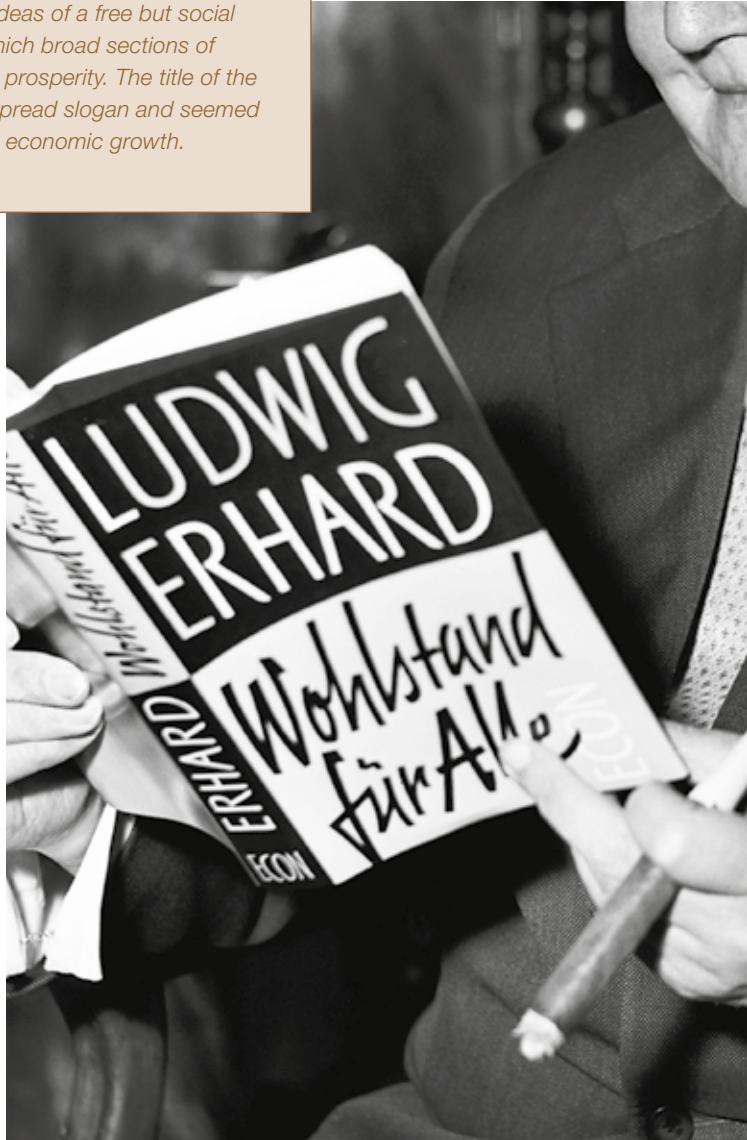
Voluntary social benefits at ABC

This socio-political character is also reflected in the history of Altenloh, Brinck & Co and the respective voluntary benefits. As the company’s economic situation improved, these increased again. Initially, these were very simple measures to alleviate hardship and poverty – for example, subsidies for a warm lunch, subsidies for the purchase of potatoes and coal to store in the cellar, transportation allowances, winter allowances, widow’s pensions, insurance contributions or additional company housing for employees.¹⁴ ABC once again provided a financial base for the company’s own pension fund:

“Due to the collapse in 1945, the assets of the pension fund were also lost with the currency reform. Only a small amount of DM 1,679 is still available. In order to enable the fund to fulfill its purpose again, DM 30,000.00 was transferred from the balance sheet surplus in the year under review with the approval of the Advisory Board.”¹⁵

Prosperity for all

In the 1957 book “Prosperity for All,” German economist and Minister of Economics Ludwig Erhard described his ideas of a free but social market economy in which broad sections of society would achieve prosperity. The title of the book became a widespread slogan and seemed to become reality with economic growth.



ABC’s factory apartments and houses

Housing has always been a significant cost for workers. Because of the large number of displaced persons and refugees, housing was particularly scarce in the postwar period. In most cases, people lived in very cramped conditions – often two or three families had to share one apartment. In this context, one of Altenloh, Brinck & Co’s important voluntary contributions was to purchase land and build and manage factory buildings or apartments for its own employees. In 1947, the company already owned 63 company apartments in 18 of its own buildings in Ennepetal. In 1950 and 1960/61 more were added at both sites.¹⁶

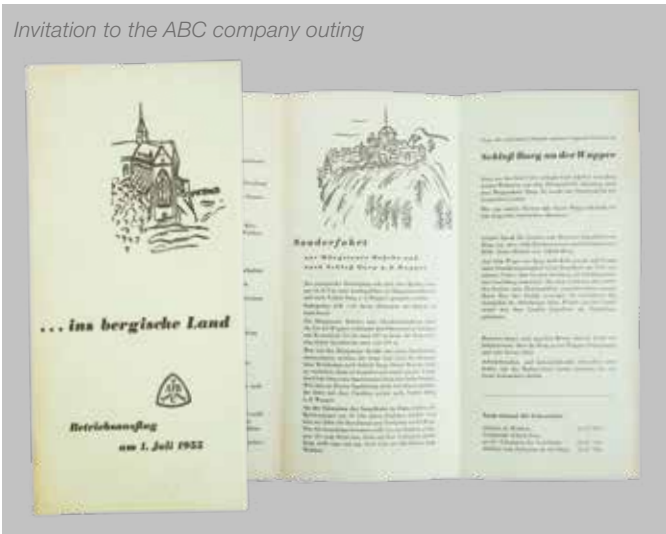


Change in voluntary benefits

As the population became more affluent, voluntary company benefits began to focus less on basic necessities and more on attractive fringe benefits, especially leisure activities. In addition, it was important for the company to recognize work performance, promote teamwork, and relieve employees. For example, employees and their anniversaries were celebrated and they received gifts, company pensions were set up, or health care from the company health insurance fund was received.¹⁷

Promotions of recreational activities

As early as the 1930s, ABC supported the leisure activities of its employees, although this was inevitably within the framework of the ideological mobilization of the Nazi state, its organizations and guidelines. In the post-war period, ABC resumed its support of recreational activities, this time free of the previous guidelines.



The primary concern was now the needs of the workforce, and these were many and varied. Since many employees were involved in the local fire department, the ABC company band was incorporated into the existing fire department band and promoted. ABC employees also formed a singing group and a string orchestra, and went on field trips supported by the company. The manufacturer also sponsored a vacation savings account, a company library, company outings, and provided subsidies for attendance at cultural events. As early as 1951, the first company sports program was established, a gymnastics department for women and girls. In 1963, the men’s bowling club “ABC-Schützen” [ABC-Archers] was founded, followed in 1968 by the women’s bowling club “ABC-Spatzen” [ABC-Sparrows]. The former “Gefolgschaftshaus” [House of Followers] was rented out under the name “Haus Ennepetal” [House Ennepetal] and later became the “Haus der Kunst,” [House of Arts] which enjoyed great popularity among the staff.¹⁸

1967 - 1985:
Under the sign of SPAX
and wheel bolts



After two decades of dynamic economic catch-up, the recession of 1966/67 ended the illusion of sustained growth in Germany and produced a shock. Although the economy recovered quickly, development lost its stability and from then on, as in other countries, there were more pronounced fluctuations in growth.

More unsettled times

In 1972, the expert panel of the “*Club of Rome*” drew attention to “*The Limits to Growth*”: the negative effects of industrialization, habitat destruction, and the finite nature of raw materials. At that time, governments began to focus on the consequences for the immediate environment and to introduce the first regulatory measures. In 1973, a world economic and oil price crisis hit Germany, causing a massive increase in oil prices and a new awareness of global dependencies. A second oil crisis followed in 1979. National debt and unemployment increased. Union membership declined.

As a reaction to the oil price crisis in 1973, fuel was to be saved in Germany through four car-free Sundays. But the savings effect was small.



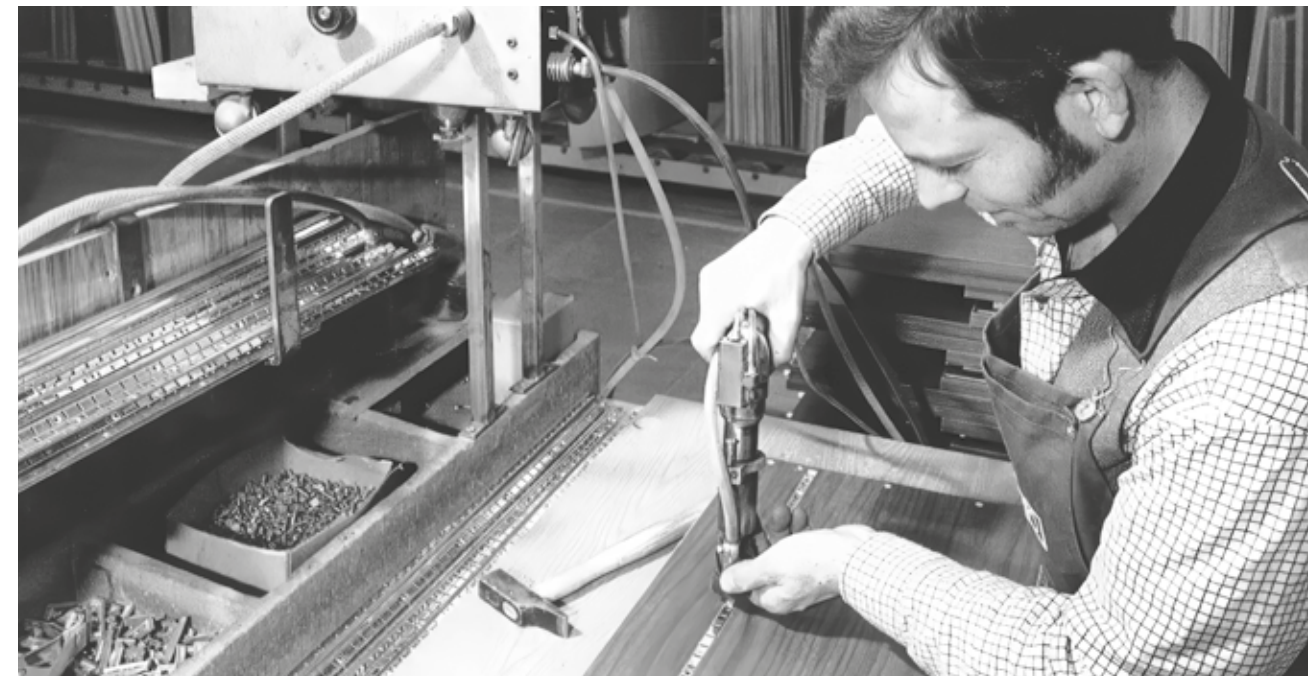
Growth fluctuations also at ABC

Throughout Germany, the harbingers of economic normalization and fluctuations could be felt as early as the early 1960s. Altenloh, Brinck & Co. also experienced economic difficulties as early as 1963, and in 1966 the weakening economy had a significant impact and annual sales fell sharply. This trend continued the following year, leading to short-time work – wage increases and the company outing were cancelled. 1968 brought an economic upturn and full employment. Benefits were increased and a small ABC Oktoberfest was held in-house in mid-September. In 1970, the company with its two plants employed 643 people, almost 39% of whom were women. In 1973, the company celebrated its 150th anniversary with a staff party.

Management

During the turbulent times of the 1960s, the management of Altenloh, Brinck & Co was in the hands of Hermann Rocholl (1924-1971), the great-great-grandson of co-founder Franz Arnold Riecke. His wife Rose-Marie Dicke (1926-2017) was a great-great-granddaughter of co-founder Daniel Altenloh – with whom he had two children, Gabriele and Frank. Robert Dicke (1930-2005), a great-great-grandson of co-founder Daniel Altenloh, also worked at ABC. He had studied mechanical engineering and worked as an engineer in South Africa for two years before becoming ABC's assistant technical director on March 1, 1959. After the sudden death of 47-year-old Hermann Rocholl in 1971, he was succeeded by the then 41-year-old Robert Dicke, who was married to Krista Körner and had three sons, Kristian, Markus and Nikolas. The managing director felt very close to the employees and celebrated his 50th birthday on September 27, 1980 with a Rhine party.

Furniture construction with screws from ABC



1967: Patenting of ABC-SPAX

Despite the economic adversity, the crisis year of 1967 was to be the beginning of an unprecedented success story for ABC – although it would take some time for this to become apparent. The company filed another patent, this time for a very special screw: the “*ABC-SPAX®*,” as it was originally called. It was a screw with a slim core, a wide bearing thread, and a sharp thread point. The idea behind this new development was that the great added value would not only be in the classic use with wood, but also in the use with new, different materials.

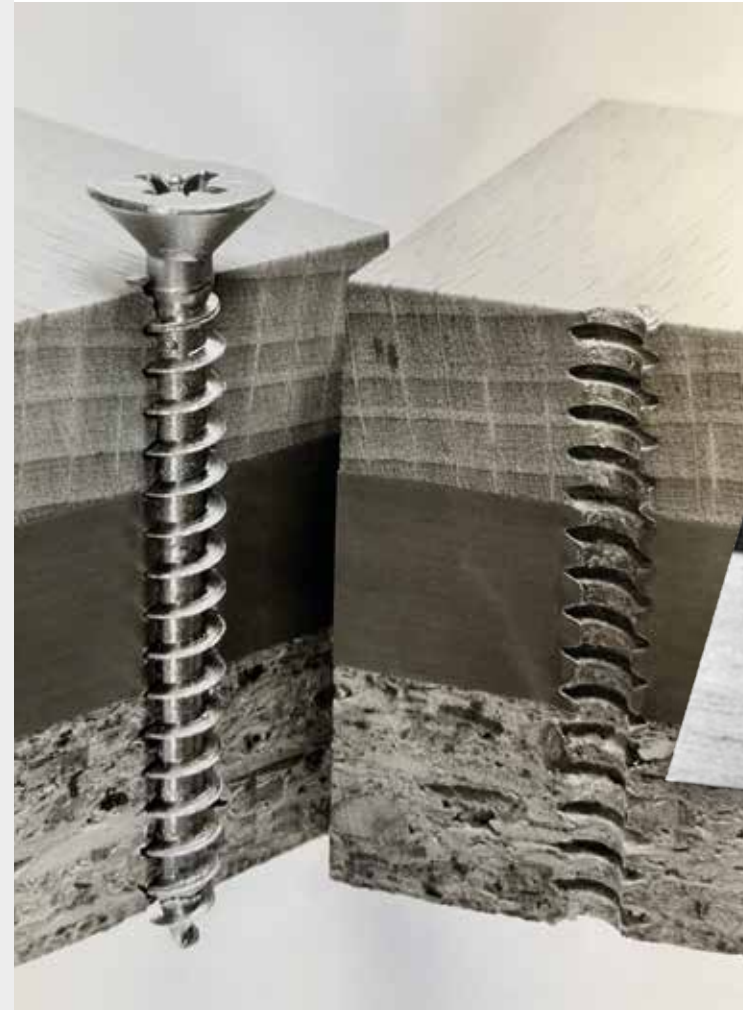


ABC logo 1965

A little more than a decade after the last modernization, ABC's logo, the arch triangle, underwent a further reduction: the double frame merged into a single line, becoming simpler and more concise. In the spirit of clear, simplified forms, the ornamental strokes at the beginning and end of the letters, the serifs, also disappeared.



SPAX revolutionizes the screw market



The universal screw ABC-SPAX 1967

Particleboard: New material as a challenge

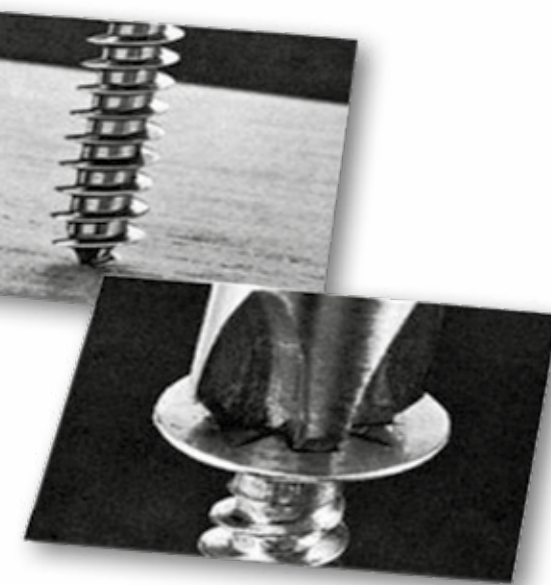
ABC's product development efforts were focused on a new material that was just beginning to take hold and that would change the furniture industry forever: particleboard. This material consisted of wood particles and binders and, unlike natural wood, was highly sensitive to conventional screws. These were weakening and grinding up the structure of the board to such an extent that a tight fit was not guaranteed. It was precisely for this difficult material that ABC had developed the new screw, hence the name “*SPAX*”: the first three letters stood for the target material, the particleboards [in German: SPANplatten], and the X for the cross-recess in the head of the screw.

From the particleboard screw to the universal screw

With “ABC-SPAX,” the tight fit in the particleboard was no longer a problem. Thanks to its specially designed fit, the new screw displaced less material. It was also made of hardened steel and had an abrasion-resistant surface. These features significantly improved the insertion torque and pull-out resistance. In addition, the time-consuming pre-drilling process was eliminated – a major economic advantage for any user. Extensive testing and practical application in the years that followed showed that the new grades also offered decisive advantages in the processing of other materials, such as hard natural woods, thin plastic parts or various construction materials. The new ABC development became the first modern universal screw.

First: Lack of interest

But the market was not yet ready for the new type of screw, and the systematic development and cultivation of markets – strategic marketing management – was just beginning. Despite its best efforts, ABC was unable to arouse the interest of hardware retailers. They were focused on what they already knew, and thus on the classic wood screw. Eventually, serendipity came to the rescue and the groundbreaking innovation made it to market.



Success with rising wholesaler

Joseph Dresselhaus visited ABC and was introduced to the new screw. As the owner of a new and upcoming wholesale company for fasteners and connectors, he immediately recognized the significant added value of the new screw. He seized the opportunity and purchased the entire production. Dresselhaus, located 150 kilometers away in Herford, became thus the first customer for the new “*ABC-SPAX*” and received exclusive marketing rights.

Dealer base grows

The business ran to the satisfaction of both parties, and it was not until 12 years later that ABC expanded its customer base. From the 1980s on, more and more dealers added the “*ABC-SPAX*” to their assortment: Ferdinand Gross in Leinfelden, F. Reyher Nachf. in Hamburg, Fr. Cordes in Norderstedt, Georg Spohr in Würzburg, Otto Roth in Stuttgart, Keller & Kalmbach in Munich, BU Baubeschlag Handel in Frankfurt, EDE Einkaufsverband in Wuppertal, EBH Europäischer Baubeschlaghandel and as a packer for do-it-yourselfers Schneider & Klein and Brauckmann & Pröbsting. After these successes, the first contacts were made with a DIY store: With Max Bahr from Hamburg as the first customer, the breakthrough was achieved and now other DIY stores also showed great interest: Bauhaus, Obi, Hellweg, Hornbach and Praktiker.

SPAX: The epitome of the universal screw

In the decades that followed, the product became the company’s top seller, the epitome of the universal screw without pre-drilling, and “*SPAX*” became a brand in its own right. It even developed into it’s own term for do-it-yourselfers: people no longer screwed, they “*spaxed*.” This word development shows the powerful self-dynamic branding by the users themselves. The product proved to be so market-defining that it became a generic word for activities, just as the word “googling” later became in German – an extraordinary development. After considerable initial difficulties, the new product became an astonishing and gratifying success story for ABC, vividly demonstrating the potential and impact of innovation.

Quality raw materials and production equipment

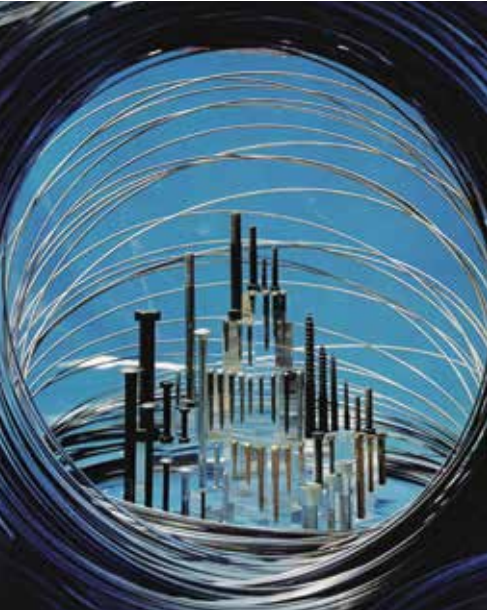
The importance of the quality of the raw material for the new screw became clear when ABC tried, but ultimately had to reject, cheaper suppliers. The main suppliers were Westfälische Draht Industrie and Hagener Feinstahl. In addition to purchasing production equipment, ABC developed it in its own tool shop, securing important skills and capabilities.

Success attracts

Due to the success of the new “*ABC-SPAX*,” the first competitors became active in the 1970s. In Germany, these were Schraubenwerke Neuss, L. & C. Arnold, Boesner of Neuwied, Schraubenwerk Gaisbach (now Würth), Otto Ziel of Hilchenbach and, in later years, Hettich of Schramberg. The first international manufacturer to attempt to enter the new market was Amano of Japan, but the strong presence of “*ABC-SPAX*” prevented the company from gaining a foothold.

Images from left to right:

From the 1960s onwards, DIY stores emerged in Germany
ABC screws presented in the futuristic style of the 1970s
ABC screw production in the 1970s



When computers were giants
This is what a computer system looked like at ABC in 1973. In the early days of computing, computers were very large and had relatively little processing power. In addition, users had to learn programming languages to operate them. But all that was about to change.



1973: Electronic data processing at ABC

In the 1970s, the development of electronic data processing (EDP) opened up entirely new possibilities for supporting production and business organization. In 1973, ABC received “a modern electronic data processing system with data display and remote data processing” and began using it in all areas of the company: for data flow between Plant I and Plant II, for market data, sales, production, materials management, work preparation, accounting, and finance. The company brochure announced that a “comprehensive computer information system” would be created. Today it is clear that this was the beginning of a development that is far from over. Even then, the goal was not only to improve individual functional areas of the company, but also to obtain data for planning and controlling the company.¹

Further development of technologies and markets

The new data processing technologies were also used in production to secure the company’s market position. In 1978, ABC introduced electronic process monitoring on all machines in Plant II, and in 1984, CNC-controlled machines for tool production – making ABC one of the first screw manufacturers to use these applications. In addition, ABC production in Gevelsberg began to tap into a new market. In 1978, the production of special fasteners for the automotive industry began – an industry in which ABC specialized more and more in the following period. In the same year, the demolition of the Brinker mill marked the end of a part of the company’s structural history.

From the industrial to the knowledge society

In the 1970s, the era of simple, standardized, industrially mass-produced goods was coming to an end. Markets now demanded more differentiated products, production processes, and distribution networks. In a multifaceted structural shift, the service sector replaced industry as the largest employer, just as industry had replaced agriculture as the largest employer around 1900. Services no longer included only simple, personal and domestic activities. In the emerging knowledge society, a new class of highly qualified professionals emerged whose expanded technical, practical, and applied knowledge and social skills generated unprecedented productive power and high returns – even for industrial companies.

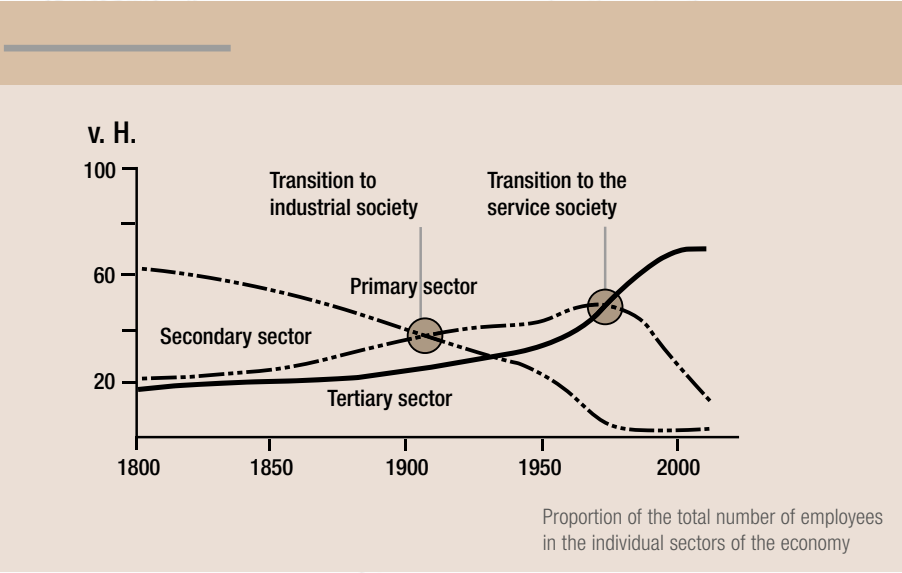


Floppy disk: Starting in 1973, a recordable and exchangeable storage medium in the form of a soft, flexible plastic disk became available for the first time.

ABC: Success through specialized, practical and application knowledge

The roots of the modern knowledge society lie in the 19th century, with inventors and innovators, in the development of the school and university system, and later in the development of the vocational training system. This is also reflected in the history of ABC. In the beginning there was the technical and economic practical knowledge and experience of the founders. With the development of machines, processes and products, the manufacturer became one of the knowledge drivers in its industry and drew its productive power from this. A good example of the outstanding productive power of differentiated innovative products, production processes and distribution networks is the invention of the “ABC-SPAX.”

The background shows an initial flowchart of tasks at ABC that should be supported and networked by Electronic Data Processing.



Practical knowledge from the ABC teaching workshop

In 1963, 33-year-old Robert Dicke (1930-2005) established a training workshop to pass on the specialized, practical and application knowledge of screw manufacturing to the next generation. As a mechanical engineer, he was aware of the importance of training for the future of the company. Thanks to the separate premises, the training of junior staff no longer had to take place during production, where it repeatedly led to interruptions. From then on, ABC had its own area and separate machines in Plant II, as well as a training manager responsible for the training workshop. At the beginning there were only two apprentices, but by 1973 there were 24 and by 1983 there were 100. In addition to industrial and technical apprenticeships, the company also offered a commercial apprenticeship. In 1970, there were five industrial and 11 commercial apprentices. Even after Robert Dicke took over the management of ABC in 1971, the apprentice workshop remained a special concern of his.



ABC teaching workshop in the early 1970s



ABC screw packs around 1973

Beginnings of marketing

Some modern brands were created as early as the 19th century. But modern marketing came later. It stands for the systematic development and cultivation of markets, called strategic marketing management. The beginnings can be traced back to the 1930s and 1940s in the USA – with the founding of the first marketing club, the first academic journal for marketing and the concept of unique selling propositions. From the 1960s onwards, the systemic, application-oriented foundations of marketing management were gradually laid. In Germany, systematic knowledge about the management of markets and brands, but also about corporate communication, did not spread until the 1970s and 1980s.

ABC's brand, marketing, corporate communications

This evolution can also be seen at ABC. The brand name “A-B-C Screws” was coined as early as 1867, the ABC arch triangle was registered as a trademark in 1897, and “ABC-SPAX” was patented and registered as a trademark in 1967. The first steps toward modern marketing and communications management followed. In 1973, a brochure was published to present the company's profile and services to external stakeholders – under the title “ABC in Profile.” In 1981, the company tried out a new distribution channel by offering its screws through a vending machine, making them available around the clock: the SPAX boy, eye-catching and brand-conscious in SPAX green. The first and only example of the SPAX boy was at the Duisburg train station. The offer was not successful, but it showed the ingenuity and open-mindedness in finding new forms of distribution. As time went on, advertising changed and ABC had promotional items such as notebooks and rulers produced to attract potential customers to the brand and keep it in their minds. In addition, ABC began to work with the press and initiated newspaper articles about the company and its products.

Main entrance of ABC in Ennepetal-Milspe in the 1970s



» **The new HR manager on the deburrer**

In the early 1970s, ABC hired a new human resources manager in the administration. After some time, this person took a tour of the company in his blue suit. There he met a conscientious worker who always made sure the work was done and the company was doing well. He placed heavy buckets of screws on the conveyor belt that ran through the plant, right next to the deburrer; the machine used to deburr screws. When the new, still unknown HR manager came by, the colleague immediately approached him, “Hey, do you work here, too?” The HR manager naturally replied, “Yes!” To which the worker responded, “Okay, that’s good. Because we need another guy for the deburrer.” «

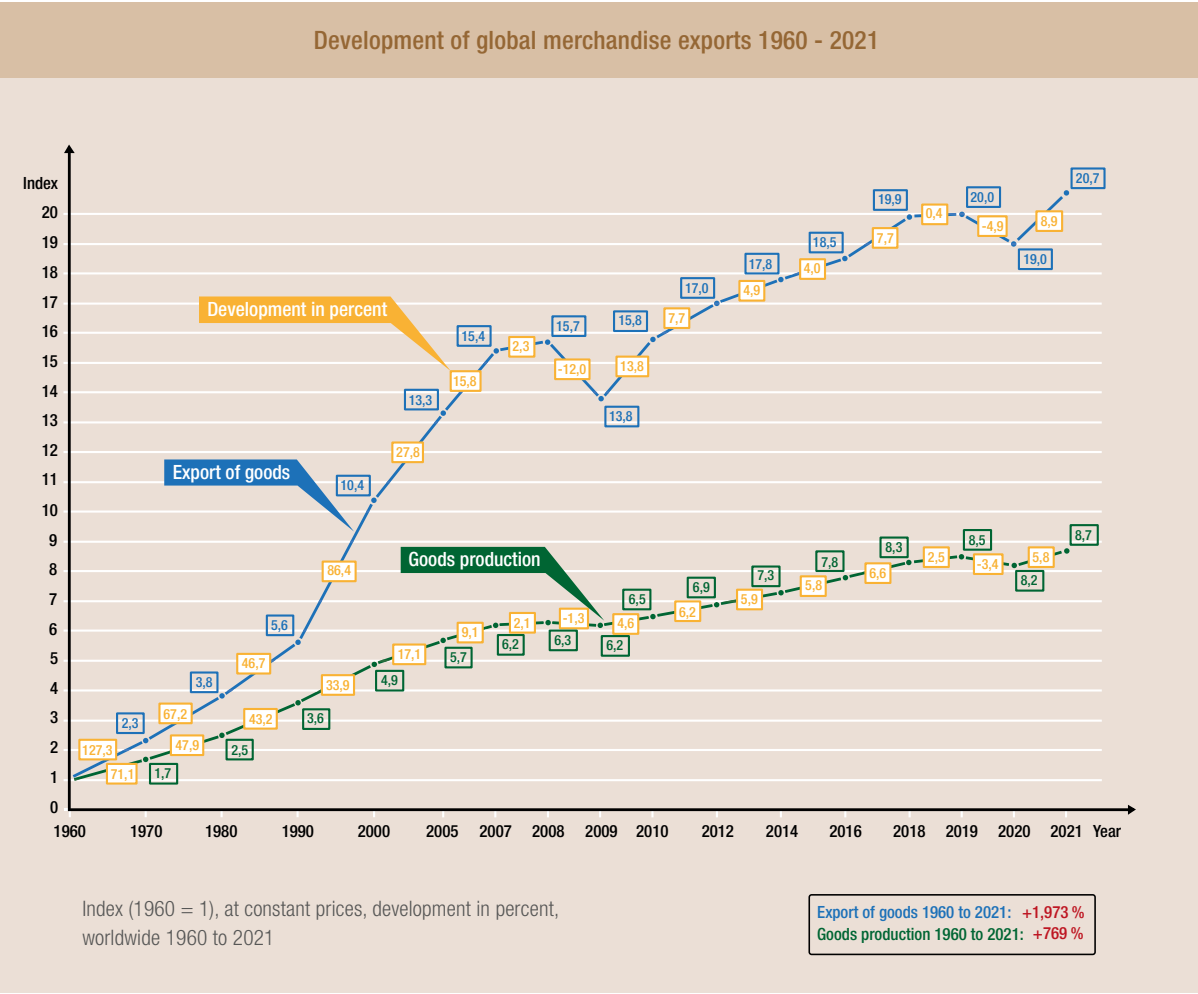
» **Worried boss after the company outing**

Around 1970, there were a number of company outings where ABC employees took a special train from Ennepetal station to the Rhine. The departure was early in the morning, and lunch and the afternoon were spent at a place on the Rhine, such as Königswinter. In the evening, the participants celebrated together in a hall, where they enjoyed food, drinks and dancing. Late in the evening, the special train rolled back home. Shortly after the train departed, an employee called the manager, Robert Dicke, and said, “Our colleague is not on the train.” Mr. Dicke, always concerned about his employees, had the train stopped and took a taxi with a works council member back to the point of departure. There the colleague sat on the bench in a humid and cheerful mood and said, “Oh, Robert, did you miss the train, too?” Together they went home. «

» **The candy in the purchasing department**

Nikolas Dicke was about seven years old and went to school in Wuppertal. He got out of school at 1 p.m., took the train back to Ennepetal, and walked down Bahnhofsborg to ABC. When he arrived at the headquarters, he asked his father to take him home. Kurt Schmidt, the purchasing manager at the time, was notified, picked Nikolas up at headquarters, and gave him a handful of candy. Satisfied, the boy drove home with his father, betting that this would be the beginning of more candy as an appetizer before lunch. The two continued their candy story for more than two weeks, but one day Mr. Schmidt was not in the office, and the desk with the candy was locked. Nikolas was very disappointed. It wasn’t until three days later that the candy delivery man returned to the office and reopened the promising drawer. «

1986 - 2013:
Internationalization
and diversification



In the 1990s, globalization, which had already become clearly visible in the 19th century, reached an unprecedented speed. One factor in this acceleration was the pressure for change under which the socialist plan-based social and economic systems with party dictatorship had increasingly operated since the 1970s and 1980s, and which ultimately led to the dissolution of the Soviet Union and the opening of China. In Europe, there was a process of expansion and integration, as well as a peaceful revolution in the German Democratic Republic (GDR), which ended on October 3, 1990, with the GDR's accession to the Federal Republic of Germany.

Cross-border trade: International interdependence

After the Cold War period, the East-West systemic competition turned – temporarily – into a “cold peace” and initiated a transformation and opening, as well as a change in the socialist economic systems. While the global production of goods grew steadily, international interdependence through cross-border trade grew much faster: from 1990 to 2000, the production of goods by all countries in the world increased by 33.9 percent and the export of goods by 86.4 percent. This massive increase in internationalization, but also in dependence on the development of the global economy, was reflected as well at Altenloh, Brinck & Co.



SPAX: Launch in Spain, Poland, France

In the 1980s, ABC began a process of systematic internationalization, especially for SPAX products. The first two sales companies were established in Spain: SPAX Safer in Barcelona in 1986 and SPAX Tornilleria in Madrid in 1990. Six years later, the Madrid office moved into its own administrative building and warehouse, and the following year had 10 employees and 25 sales representatives. In 1994, ABC Visserie, the sales company for France, was founded with 11 employees and 20 representatives – by 1997, the manufacturer already had 1,000 customers here. In 1995, ABC Poland was established, which became SPAX Poland in 2008. In 1997, a new office and warehouse was built in Krakow, and from 2003 to 2008, ABC began manufacturing in Poland. In 2013, SPAX Pacific, Australia and New Zealand was established.

Next steps: USA, UK, Turkey, Benelux

ABC entered the large US market in 1996 with the establishment of Altenloh, Brinck & Co Inc., initially in Charleston, South Carolina. The following year, ABC opened a sales office in Kettering, UK, with six employees and 1,300 square meters of warehouse and office space. In 1997, ABC's former importer in Turkey became a subsidiary and the owner became its managing director. ABC had already 150 customers and the sales focus was on Istanbul, Ankara and the Aegean coast. In 2001 a sales department for the Benelux countries started its work.



Strategic development in the US market

After 10 years in the U.S. market, ABC expanded its presence through acquisition. In 2006, ABC acquired TRUFast, a manufacturer of roof fasteners in Bryan, Ohio, founded in 1981. In addition to SPAX, this gave ABC USA a second established brand in a related market segment. In addition, the TRUFast manufacturing facility was used to produce SPAX. In order to expand the TRUFast product range, the company ES Products was acquired in 2013.

ABC: International expansion as of the mid-1980s



SPAX universal screw
The SPAX universal screw with countersunk head is available with both full thread and partial thread. Fully threaded screws are suitable for absorbing large tensile and compressive forces in connections. Partially threaded screws ensure a secure and gap-free connection of two wooden components

Continuation of the SPAX success story

The DIY sector played a special role in the increasingly successful marketing of SPAX. For a long time, quality products could only be bought in hardware stores, and DIY stores were more like import bazaars. However, in 1975, the German sales department began selling to this sector already in 1975 – as a two-person operation – and developed into an important do-it-yourself segment that supplied DIY stores. With the success of SPAX, it was time for the next innovation in the professional and DIY market: in 1989, the second generation of SPAX, the “*SPAX-S*,” was launched. Featuring a patented serrated edge from the sharp tip, it allowed for quick driving without the need for time-consuming pre-drilling. In 2005, the third generation of SPAX followed: with a 4CUT tip for reduced splitting in wood, the additional 4CUT cutter from a screw length of 160 mm for reduced driving torque, the countersunk head called MULTI head with milling function in wood and braking function in metal, the T-STAR plus power grip for optimum power transmission and the matching T-STAR plus Bit for a perfect fit in the SPAX screw. In the meantime, other new products have been introduced, such as the “*FEX window screws program*,” the “*GIX drywall screws program*” or the “*SPAX frame anchor*” for dowel-less fastening of window and door frames.

Targeted branding

From the 1990s, brand awareness grew and led to a targeted brand policy: In 1992, the ABC triangle on the screw head of the SPAX-S made it instantly recognizable. In 2005, the “*SPAX*” brand was added to the head of the third generation of SPAX screws. In 2008, ABC Verbindungstechnik was renamed to “*SPAX International*” so that customers, employees, suppliers and other stakeholders could clearly associate the well-known brand with the company name and its image. In 2005, “*SPAXI*” was created, a strong, friendly cartoon character in the form of a bouncy SPAX screw with a smiling face for the young target audience, the SPAX customers of tomorrow. In addition, SPAXI appeared as the world’s only screw puppet and a SPAX Bobby Car was released as a special edition. In 2008, the brand identity was unified and ABC subsidiaries changed their names to include SPAX. That same year, the German TV celebrity and do-it-yourselfer Konny Reimann visited the company and began a close collaboration as brand ambassador in 2010.



SPAXI, the friendly strong cartoon character

Growing competition from Asia

Since the 1990s, the screw industry has seen a significant increase in imports from the Far East, particularly Taiwan, China and Malaysia. While the import share of the German screw market was still 25% in 1991, it had already risen to 43% by 1999. In view of this expected development, the medium-sized screw industry had already started to focus more and more on high-quality products, special designs and drawing parts in the 1980s and is now continuing to do so.



ABC logo 2000
The 1965 logo undergoes another minor modernization in 2000: the narrower guidance of lines, letters and screws in the style of the 1960s is adapted to the times, i.e. slightly reinforced. This creates the high-contrast, expressive ABC arch triangle that is still used today.

German Screw Association e. V. [registered association]

In this market situation, the German Screw Association proved to be an effective association that provided support, particularly in the technical area, through the exchange of experience, working groups, seminars, workshops and conferences, and promoted close cooperation with universities. In accordance with its own tradition and market position, ABC, under its Managing Director Robert Dicke, played a leading role and was involved in the founding of the “Deutscher Schraubenverband e.V.” [German Screw Association] in 1977 and the reorganization of the association’s work. In addition, ABC was represented and active in other organizations through membership in the ifo Institute for Economic Research, the Federation of German Industries (BDI), the South Westphalian Chamber of Industry and Commerce (SIHK), the European Industrial Fasteners Institute (EIFI), the Industrial Fasteners Institute (IFI), Ohio, USA.

Automotive industry: Main customer for screw industry

The largest customer for German screws was the automotive industry: In 1999, about half of German screw production was used in this sector. Overall, the automotive industry had become the leading industrial sector of the German economy over the decades. In 1989, car production reached a record high of 4.1 million vehicles, 61.3% of which were exported. For ABC, this was an obvious and attractive industry – as early as 1978, ABC had started to produce special screws for car manufacturers and then systematically expanded this.

Plant II: Specialization in automotive industry

It was Plant II in Gevelsberg that served this market and became an increasingly competent and sought-after supplier to automotive manufacturers and their suppliers. In 1988, an automated high-bay warehouse was added to Plant II, allowing the company to serve customers even more efficiently. The former main product of the Gevelsberg production was standardized hexagon socket screws, which were increasingly replaced in the 1990s by more sophisticated drawing parts according to the requirements of the automotive customers. By 1999, the proportion of special parts was already 80-90%, and for many products ABC, with its technical, practical and application knowledge, began to play an active role in the technical development, design and manufacturing processes. A fire in Plant II at the end of 1991 led to a halt in production there, but thanks to the full commitment of the workforce at both sites, production was up and running again in just over two weeks. In the increasingly tightly scheduled automotive industry, with its severe contractual penalties, the workforce thus secured the existence of this ABC business unit.

1990: Purchase of AZ Ausrüstung und Zubehör

To better serve the growing automotive market with more complex components, ABC acquired its customer AZ Ausrüstung und Zubehör in 1990. The company, located 30 kilometers to the west in Heiligenhaus, specialized in the development and production of plastic injection molded and metal parts – from simple to complex components. As the largest supplier of adjustable feet for washing machines and dryers, it had a market share of 80% in Germany and 25 to 30% in Europe.



Das neue und futuristisch gestaltete Verwaltungsgebäude der Firma A-Z in Hattingen

A-Z stellt sich vor !

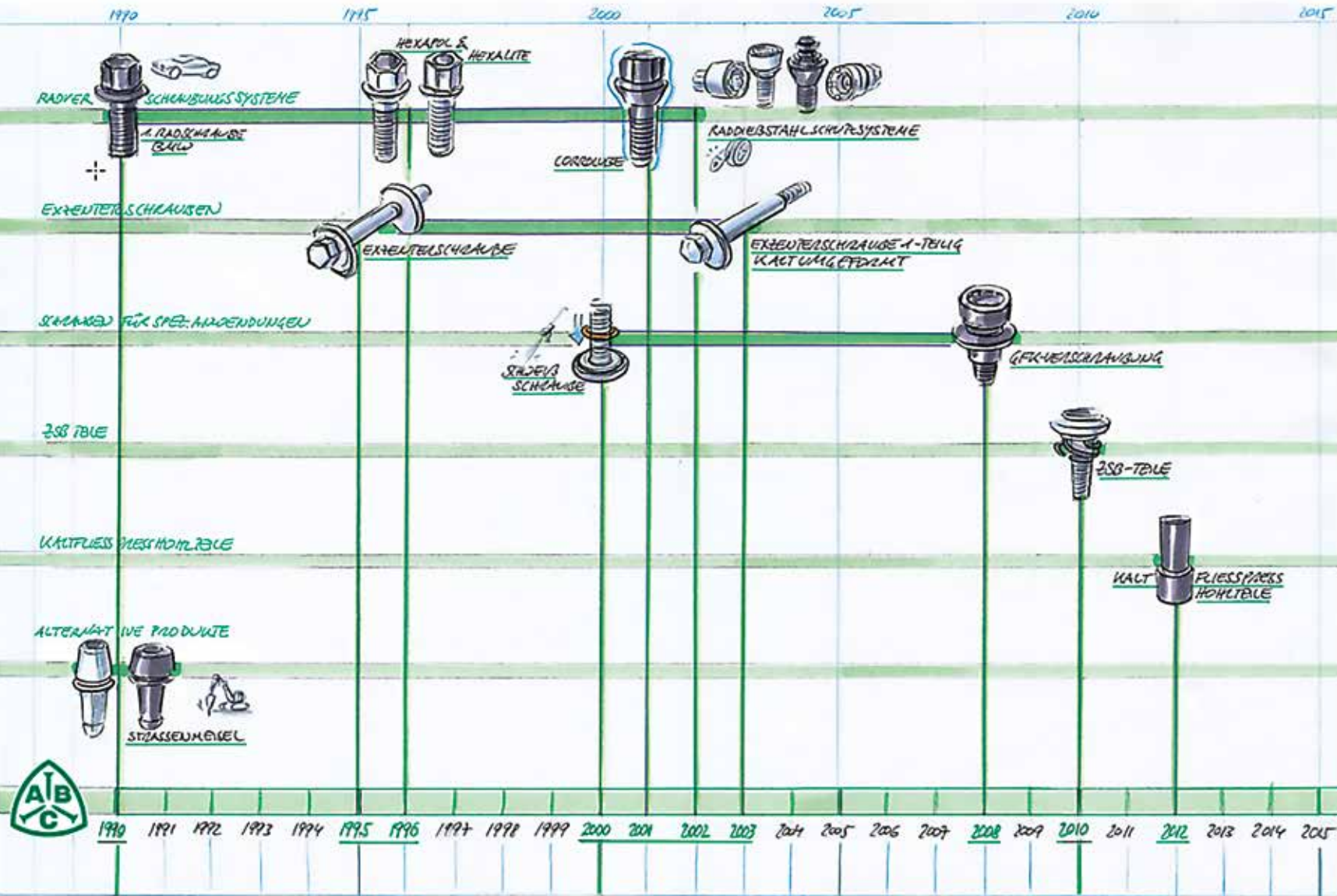
Neubau in Hattingen schafft optimale Voraussetzungen

Von A-Z-Team

Das 1990 in Heiligenhaus (bei Velbert) gegründete Unternehmen ist seit 1991 ein Tochterunternehmen der Firma Albrecht, Brück & Co. Auftragsmäßig bezieht das Produktionsprogramm ausschließlich Kunststoff- und Gießteile, sowie einige Stanzteile für die Möbel- und Hausgerätereinrichtung. Nach Übernahme durch die Fa. ABC im Jahre 1991 und Eintritt einer neuen Geschäftsführung fand eine strategische Neustrukturierung des Unternehmens statt. Um unabhängiger von bisherigen Hauptkunden der Hausgerätereinrichtung (besonders der deutschen) zu werden, suchte man nun zunehmend den internationalen Kontakt. Dieses führte dazu, dass die Fa. A-Z inzwischen der größte Anbieter von Selbstspann- für Waschgeräte und Trockner in Europa geworden ist. Mit einem Marktanteil von 80% in Deutschland und europaweit inzwischen ca. 25% - 30%, kann A-Z Unternehmen wie Bosch-Siemens-Hausgeräte, AEG, Whirlpool/Bauknecht und Miele zu seinen Kunden zählen. Es ist demnach ziemlich wahrscheinlich, dass sich auch unter ihrer Waschmaschine bzw. Trockner Geräteteile der Fa. A-Z befinden. Aufgrund der strategischen Planung und dem damit verbundenen Wachstum war es notwendig geworden, die Produktions- und Lagerkapazitäten auszuweiten. Da die Räumlichkeiten in Heiligenhaus bereits für den vorhandenen Umsatz kaum ausreichten, suchte man einen neuen Standort. Nach längerer Suche entschied man sich letztendlich für ein Grundstück (14.000 m²) im „Industrie- und Gewerbegebiet Hirschholthaus“ in Hattingen. Hier wurde zunächst eine Produktionshalle von 4.500 m² und anschließend ein zweistöckiges Verwaltungsgebäude mit 700 m² (siehe Foto) erstellt. Das Grundstück ist groß genug, so dass bei Bedarf eine zweite Halle von gleicher Größe gebaut werden kann.

The new location of AZ Ausrüstung und Zubehör in Hattingen is presented in 1996

ABC Umformtechnik in Gevelsberg: Product development since 1990



2003: Restructuring of the ABC group of companies

As Altenloh, Brinck & Co. became increasingly specialized in its fields of activity, the company was restructured on January 1, 2003, in accordance with these focal points. The parent company, ABC, acted as a holding company and split its operations into two separate companies. The main activity of Plant II became “*ABC Umformtechnik GmbH & Co KG,*” while the main activity of Plant I became “*ABC Verbindungstechnik GmbH & Co KG,*” in particular with SPAX products. This increased transparency, improved the allocation of responsibilities and also saved taxes.

Competence expansion: Purchase of SFF and ADL

To further strengthen its automotive capabilities and presence, ABC acquired ADL Construction Mecanique, a French manufacturer of anti-theft wheel bolts, in 2005 and integrated it into its own company. The following year, ABC acquired the French company Société des Forges de Froncles SFF, based in Froncles, some 400 kilometers southwest of Ennepetal. The manufacturer, founded in 1906, specializes in cold forged parts and joining technology consulting for a wide range of industries, but is particularly active in the automotive sector.



Plant I in Ennepetal-Milspe and Plant II in Gevelsberg 1991

ABC training: Attracting young talent

The ABC training workshop, founded in 1963, has trained and continues to train a large proportion of the junior staff required by ABC's increasingly specialized fastening and forming divisions. In 1990, in view of the opening of the German-German borders, the ABC trainees went to the GDR Screw Combine in Tambach-Dietharz – a very special training trip. In 1999, ABC participated in its first training fair at the vocational school in Ennepetal. The ABC trainees themselves designed a brochure about their training professions and presented their professions and their daily training world from their own point of view. The company continued with this idea and in 2001 launched its own website for the training workshop – designed by two ABC trainees in cooperation with the company's agency. In the same year, ABC and other partners founded the GAPA Association for Business and Work Process Oriented Training.



Attention to career and training opportunities

In 2004, ABC started a cooperation with the local secondary school Alte Geer. Students in the 6th grade get to know the training workshop by building something for their own school together with ABC trainees and instructors. The following year, ABC started the “Mechanical Engineering Day.” Since then, ABC has opened its doors to children of the same age group – regardless of school type – and let them experience the world of practical mechanical engineering for a day. In 2006, the training workshop participated in the German Bobby Car Championship for the first time, and also took part in the Gevelsberg soapbox race with a home-made car in screw look.

Further modernization ABC training

After ABC purchased the adjacent property of the former Schmermund company in Gevelsberg in 2005, the existing building was renovated and part of it was converted for the training workshop. In 2007, ABC training moved into the self-designed facility, which has since tripled in size to 600 square meters. The following year, Krista Dicke, the widow of Robert Dicke, who died in 2005, established the Robert Dicke Award for the best industrial ABC trainee, which has been awarded annually since then. Since 2011, ABC has offered a dual study program and has hired its first two students for this purpose.



First award for the best industrial apprentice in 2008: Award ceremony for Thorsten Kowalski by Krista Dicke, widow of the founder of the training workshop Robert Dicke (1930-2005) and ABC Managing Director Dr. Wolfgang Carmele



The trophy for the best industrial trainee at ABC was donated in 2008 and has been awarded annually since then



Generationswechsel im Werk II

Unser bisheriger Ausbildungsleiter und Leiter des BMB Werk II, Friedrich Förster, musste Ende Januar 2002 aus gesundheitlichen Gründen seinen wohlverdienten Ruhestand vorzeitig antreten. Seit dieser Zeit arbeitet die Lehrwerkstatt in Eigenregie unter der Leitung der Herren Hans-Jürgen Barth und André Mohnecke. Herr Förster, der mehr als 36 Jahre die Lehrwerkstatt geleitet hat, lud seine Nachfolger (Hans-Jürgen Barth, LW, sowie André Steinbrinck, BMB) am 31. Januar 2002 zu



einem Fototermin in die Lehrwerkstatt ein, um die symbolische Schlüsselgewalt auf seine Nachfolger, die auch unter seiner Leitung ausgebildet worden sind, zu übertragen. An dieser Stelle möchten wir noch einmal Herrn Förster für sein unermüdliches Engagement sowie seine Erfahrungen, mit denen er uns in vielen Jahren zur Seite stand, herzlich danken.

A. Mohnecke



Konny Reimann visits the SPAX training workshop

Economic fluctuations

Altenloh, Brinck & Co benefited from an economy that was often strong in its sectors, but also felt the effects of downturns and crises – this was true of both the construction and automotive industries, the two main sectors in which the company was active in the 1990s and 2000s. During the global economic downturn in 1993, ABC had to terminate 163 employment contracts; 1997/98 brought a significant upturn, but this was followed by a downturn in 1999. In 2000, the dot-com bubble of the “*New Economy*” burst, taking the global economy with it. After a renewed upswing, the collapse of the U.S. investment bank Lehman Brothers in 2007-08 led to a global financial crisis that also hit ABC – the company had not experienced a crisis of this magnitude since the end of World War II. Sales fell in both divisions, necessitating cuts in virtually every area of the company. This was followed in 2010 by the euro crisis, a multifaceted crisis in the European Monetary Union that made a rapid economic recovery difficult.

New sector: Acquisition of SABEU in 2010

With the acquisition of SABEU in 2010, Altenloh, Brinck & Co. entered a completely new sector. The company is located in Northeim, about 200 kilometers west of Ennepetal, and was founded in 1958 by Karl-Heinz and Gertrud Sander-Beuermann – hence the name SABEU. The company specializes in injection molding and membrane production solutions for laboratories, the packaging industry and medical technology.



Nikolas Dicke welcomes the staff of SABEU 2010 in the ABC group



Growing workforce

The number of employees at Altenloh, Brinck & Co has grown in line with internationalization, specialization and the expansion of the industry. From 2000 to 2013, the number of employees in the various business units increased from 805 to 1,184 and in the international sales offices from 77 to 287. In order to provide information in an increasingly large and diverse company, the first internal newspaper was launched in 1996. Following a survey of employees, the same title was chosen as that of the two brochures published in 1973 and 1991 to present the company to external audiences: “*ABC in Profile.*” The internal magazine was and still is a mirror of the company's history and development. For example, it reported on the change from self-service “*SB*” [*Selbstbedienung*] to do-it-yourself “*DIY*”, on “electronic data processing” (EDP), and on “*the Internet,*” including website recommendations, at a time when search engines did not yet exist.

Innovations and internal changes at ABC

After 151 years, the company health insurance fund, whose beginnings date back to 1856, was spun off from the company and in 2007 became the independent “*ABC Betriebskrankenkasse,*” which was integrated into the Novitas health insurance fund. In 2008, the company soccer club “*BSG SPAX 67*” was founded, whose players had already met in 1995 to play together. This continued with friendly matches with customers or other companies in the region. In 2005, ABC’ factory apartments, most of whose tenants had retired, were put up for sale and purchased by the residents. The Art Nouveau villa built in 1899 by Carl Robert Dicke (1857-1930), owned by ABC, was sold in 2007.



SPAX advertising with TV star and handyman Konny Reimann

**Foundation initiative of the German industry
on Nazi forced labor**

In 1999, on the initiative of the German government, a foundation of German companies was established to address the extent of forced labor under National Socialism and how to deal with its consequences. More than 6,300 German companies supported this initiative, making a financial contribution to “Compensation for Nazi Injustice for the Forgotten Victims” and thus creating legal security against lawsuits. In total, companies donated a sum of five billion euros for compensation, which was topped up by the government with another five billion euros and paid out to former forced laborers. Altenloh, Brinck & Co. also had forced laborers from 1940 to 1945 – according to the American Jewish Committee, the total number of forced laborers at ABC was 70. ABC joined the initiative and donated 175,000 euros.

ABC Management

Since 1971, the company has been managed by Robert Dicke (1930-2005), a great-great-grandson of co-founder Daniel Altenloh. He expanded the management to include three managing directors and three authorized signatories. His sons also joined ABC. Kristian Dicke (1964-2001) joined the technical department in 1998 after studying mechanical engineering. He left the company in 2000 and died in an accident in 2001. Nikolas Dicke (*1968) studied communication science and later obtained an MBA – he completed an internal training at ABC and he worked for several years in sales at a power tool manufacturer. In 2002 he took over the management of ABC in the USA and in 2010 the management of SABEU, the Northeim-based manufacturer, which was acquired by ABC. When Robert Dicke retired in 2003 at the age of 73, the management of ABC was taken over by non-family members for the first time. Until 2009, the position was held by Dr. Wolfgang Carmele, and then until

2013 by Klaus Hagedorn, who had previously managed the business of ABC’s subsidiary AZ Ausrüstung & Zubehör since 1991, which had been acquired by ABC in 1990.

Change in composition of the Advisory Board

From the very first Articles of Association in 1895, which transformed ABC into a limited liability company, the company was represented not only by one or more managing directors, but also by an Advisory Board. It always consisted of five members, all of whom had to be shareholders. One shareholder per founding family was elected to the Advisory Board. It was not until the 2006 Articles of Association that this rule was changed – from then on, the Advisory Board was to consist of five to eight members, who no longer had to be shareholders, but who were to contribute to the success of the company through their expertise.

Celebrating at ABC

Robert Dicke, managing director of ABC, had already celebrated his 50th birthday with the workforce, and in 1990 and 2000 he did the same for his 60th and 70th birthday. Shortly before that, in 1998, Altenloh, Brinck & Co celebrated its 175th anniversary with employees and shareholders, customers and suppliers, and guests from politics and society. In 2006, the company held its first company party to which the families of all employees were invited. The company’s parking lot in Ennepetal provided fun, games and refreshments for young and old.



*Minister President Wolfgang Clement
and Robert Dicke
on the occasion of the
175th anniversary of ABC*





» **Clean curtains in the purchasing department**

Our former purchasing manager had just left the company, and our managing director, Robert Dicke, had appointed his son, Kristian, as his successor, so that the freshly graduated mechanical engineer could familiarize himself with the practical side of our business. Two weeks later, the new purchasing manager walked into our open-plan office full of verve and said, "I'm going to take down the curtains right now. Each of you can take one home, wash it at home and bring it back tomorrow." No sooner said than done, our new boss climbed up a stepladder and took down the curtains one by one. We looked at each other questioningly, but no one wanted to stand in the way of our new junior boss's creative saving zeal. Just then, Mr. Dicke Sr. happened to walk across the hall, entered the purchasing department and asked, "Kristian, what are you doing?" The dutiful son replied without hesitation, "Dad, what does it look like I'm doing?" Without another word, Mr. Dicke Sr. left the room, and after closing time, each of us took "our" personal piece of ABC laundry with us. The next day, of course, we brought back the freshly washed curtains, and Mr. Dicke Jr. hung each one properly. His father would often walk by the open-plan office and look at the freshly laundered curtains and shake his head.

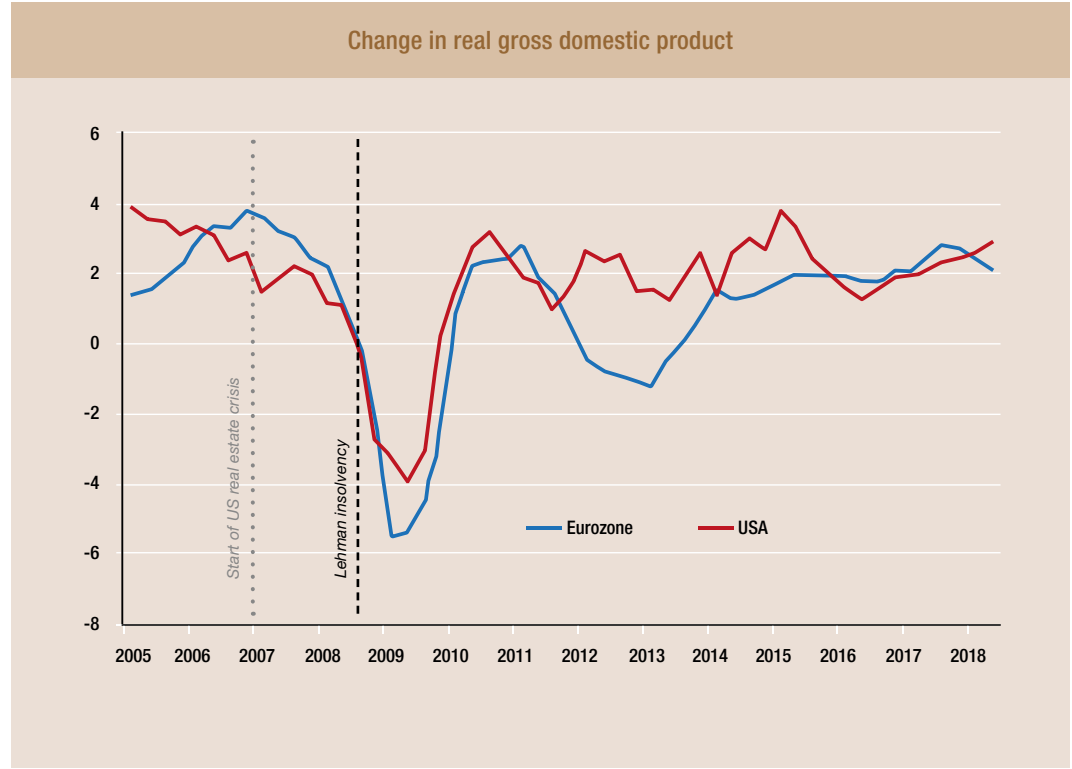


» **Vacation prank with support from the very top**

The controlling department used to have a nice tradition of vacation pranks, in which a creative surprise awaited the female colleagues on the first working day back from vacation. Sometimes the stuffed animal was kidnapped from the desk and could only be freed after a scavenger hunt through the office, sometimes the start screen was turned upside down, and once the entire work area was wrapped in paper. It was the time again when we were waiting for a person to return from vacation. During the lunch break, the three of us set out to wrap her desk, computer, mouse, keyboard, and every single paper clip in newspaper. That's when the door opened and our then ABC CEO, Dr. Carmele, walked into the office. He talked to us, had the operation explained to him, and went back to his office without saying a word. A short time later, he was standing next to us again, pressing his daily Handelsblatt [commercial gazette] into our hands as packing material. We were thrilled having active support in printed form from the very top.



2014 - 2023:
Consolidation and strategic
further development



In the 21st century, the balance of power in the global economy began to shift. In 2009, China replaced Germany as the world’s “*export champion*” and set out to become the world’s largest economy. Under new auspices, systemic competition was revived – between market democracies and newly empowered dictatorships with growing self-confidence and appeal as models in a complex world. The struggle over the rules of the game of globalization, technological standard-setting, and digital valuation became increasingly apparent. The Corona Crisis from 2020 to 2022 and Russia’s invasion of Ukraine in 2022, with the triggered European energy crisis, caused a global economic crisis and made it clear that the Cold Peace could once again turn into a Cold War.

Challenges for ABC

Altenloh, Brinck & Co. felt the effects of the changes in the global economic structure mainly in the form of growing competitive and price pressure in the markets, which increased significantly with the economic crisis of 2007/08. After cost-cutting measures had been implemented, the recovery failed to materialize and ABC was unable to return to its previous business strategies in its two main business areas: High-quality fastening products and special parts for the automotive industry. Despite increasing sales, earnings declined. With a long-term program for the future, ABC began to review the situation and strategies of each division and to initiate further strategic development.

Automotive industry: Growing pressure

While the German and European automotive industry had long been a promising and important sector for the screw manufacturers based there, the situation was becoming increasingly bleak. The pressure on prices, efficiency, quality and innovation continued to increase and reached the ABC subsidiaries – AZ Ausrüstung und Zubehör, ABC Umformtechnik and SFF.

AZ: Self-administered insolvency and transition

Since its acquisition by ABC in 1990, AZ had been seeking a strategic direction and greater independence from its main customer. In the early 2000s, AZ launched a new sales approach, and in 2015 it opened a new production facility near automakers in Mexico. But the following year, the CEO’s suicide revealed that financial figures had been manipulated, sales had halved since 2007, and the business model was unsustainable without restructuring. After a self-administered insolvency, a suitable strategic investor was found in the Vollmann Group, a supplier specializing in the automotive industry.

Global perspective for ABC Umformtechnik

Since the restructuring of the ABC Group in 2003, the difficult economic situation of ABC Umformtechnik had become apparent, which did not improve sustainably from 2008 onwards despite cost-cutting measures. “*Dieselgate*” and the trend towards e-mobility added to the pressure. As a leading supplier of wheel bolts to all German and European car manufacturers, ABC Umformtechnik was able to find an investor who offered prospects in the globalized market. In 2021/22, the company was sold to the FAWER Group, a Chinese automotive supplier with a direct link to the FAW Group – First Automotive Works – which is on its way to becoming a global supplier.





SPAX International: New strategy

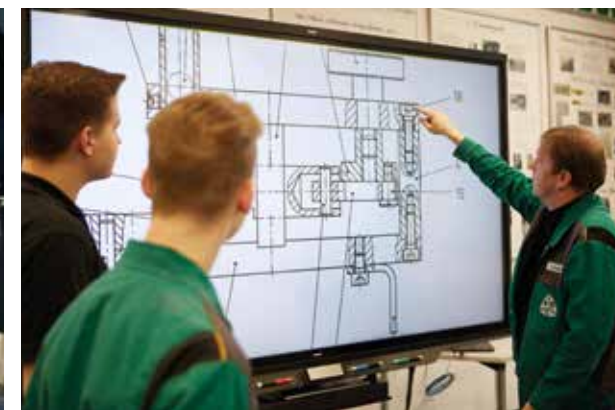
At SPAX International, the markets were also under strong conversion pressure – increasing sales were not reflected in a corresponding profit development. From 2017 to 2019, SPAX addressed the profound changes in the market, developed a strategy and started implementing it: eCommerce development, social media strategy, fan store, product range expansion, service chain optimization, digital modernization and more. The Covid-19 pandemic led to record demand and major investments in capacity expansion at SPAX, including the construction of a new logistics center. The energy price and economic crises caused by the war in Ukraine increased costs and reduced demand. In our 200th year, the times are challenging again.



SPAX employees in an exchange with a trade fair visitor at the international industry trade fair Dach & Holz in Cologne, Germany

Wide range of ABC training

Since the start of the ABC training workshop in 1963, the company has trained a total of 510 young people in the industrial sector – as industrial mechanics, electronics technicians for industrial engineering, cutting machine operators, machine and plant operators, toolmakers, materials testers or mechatronics engineers. Of these, 30% are still working in the company as skilled workers, foremen, shift supervisors, foremen or other supervisors. In the last 50 years, ABC has trained around 210 people in the commercial sector. Since 2017, offers for IT specialists have been added. In addition, the company has been offering dual study programs for mechanical engineering, business administration, business informatics and computer science for several years.



*Award
Maximilian Blameuser
as best industrial apprentice
of ABC 2021 – from left in
the picture:
André Mohncke,
Maximilian Blameuser,
Hans-Jürgen Barth,
Krista Dicke,
ABC Managing Director
Frank Haberstroh
from 2013 to 2023,
Karlotta Dicke*



*ABC Teaching Workshop:
Learning, practicing and also having fun – here at the
Gevelsberg soapbox race 2006*

USA: Growth strategy taking effect

In 2017, ABC acquired Rodenhouse, an American manufacturer of innovative fasteners for walls and facades, complementing its portfolio. In the same year, the U.S. business became its own ABC business unit with a growth strategy focused on the U.S. markets. This led to historic growth in production and headcount. From 2020 the U.S. business became the largest business unit in the ABC Group. In 2022, ABC opened a new logistics center and a new training center and expanded its efforts to attract both junior and senior staff.

*Opening of new training center
in 2022 at ABC in Bryan, Ohio*

*Installation of fastening systems
from TRUFast Walls,
a brand of ABC in the USA*



*The two SABEU own brands FLUXX packaging solutions,
here a pouring tap in use, and cellQART for cell culture products,
as well as the new production facility in Norheim*



SABEU – good development as a new business sector
In 2017, SABEU opened a new production facility at its headquarters in Norheim. With the further development of its strategy, SABEU is focusing on three areas: rapid microbiological tests, the own brands FLUXX for packaging solutions and, from 2020, CellQART for cell culture products. The company has begun to implement this focus through various activities, including strengthening international sales, marketing to scientific audiences and offering to co-develop innovations according to customer needs.

ABC: Modernization of Articles of Association and Family Code

To strengthen the cohesion of the shareholder families, the Articles of Association were revised and modernized in 2016/17. In addition, the ABC's shareholders drew up a Family Code, which now supplements the legal and economic regulations. In this way, they have created a common framework of values and actions that describes the self-image as well as the rights and obligations of the shareholders. In addition, the roles of shareholders, Advisory Board and management were summarized and defined. Since then, contact between shareholders and the Advisory Board has been systematically coordinated, and ABC's shareholders are provided with all the latest information on the company's business.



ABC Management

At the end of 2013, Frank Haberstroh took over the management of ABC. As of May 2023, this management position is once again in the hands of a descendant of the founders and is now held by Nikolas Dicke (*1968), the great-great-great-grandson of co-founder Daniel Altenloh, who has been with the company since 2001.



200 years of Altenloh, Brinck & Co.

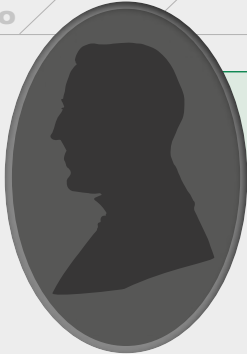
When Altenloh, Brinck & Compagnie celebrates its 200th anniversary on Friday, September 8, 2023, employees and shareholders will celebrate together. The basis for the common present is the long history of this family business. It is also the starting point for the next century.



At a glance: Portrayals across time

The heads of the ABC
Managing Directors from formation until now

The heads of the ABC



Johann Christoph Wellershaus 1766-1826
Co-founder, designer first hand operated screw cutting machines
⌘ 1804 Anna Catharina Kregeloh 1789-1853

First child 1805-1805

Karl Wilhelm Theodor Wellershaus 1806-1879

Helene Wilhelmine Wellershaus 1810-1835

 **Johann Ludwig Wellershaus 1814-1874**
Entry as a partner from 1939, management from 1851, Administrative manager from 1856
⌘ 1839 Caroline Wilhelmine Henriette Schlieper 1815-1879

 **Carl Ludwig Wellershaus 1840-1873**
Technical management from 1865, Authorized signatory and later management
⌘ Bianca Müller 1842-1927

Ludwig Theodor Richard Wellershaus *1868

Oscar Wellershaus 1870-1915
⌘ 1897 Lydia Anna Margarete Richter *1877

Joachim Wellershaus *1902

 **Georg Wellershaus 1905-1974**
Member of the Supervisory Board/Advisory Board 1939-1974, Vice Chairman 1971*
⌘ Margarete Oetker 1909-1984

Käthe Wellershaus *1908

 **Felix Wellershaus 1871-1939**
Joined in 1895, authorized signatory from 1903, Managing director from 1920
⌘ 1899 Helene Hermine Baukloh *1878

 **Kurt Wellershaus 1900-1978**
Joined in 1923, authorized signatory in 1925

Agnes Sophie Wellershaus 1889-1918**
⌘ Johann Heinrich Haarmann 1879-1943

Gisela Haarmann 1913-2008
⌘ Paul Herbert Hans Schütte 1905-1990

 **Albrecht Schütte 1940-2023**
Advisory Board 1989-2012, Vice Chair 2004 and 2008-2011

 **Horst Haarmann 1910-2000**
Advisory Board 1975-1985

Lina Wellershaus 1842-1874
⌘ **Friedrich Hefendehl † 1903**
Authorized signatory from 1889

Carl Wellershaus 1845-1905

 **Albert Wellershaus 1848-1921**
Joined in 1873, authorized signatory from 1874, Administrative manager from 1876, Supervisory Board until 1921

AGENDA

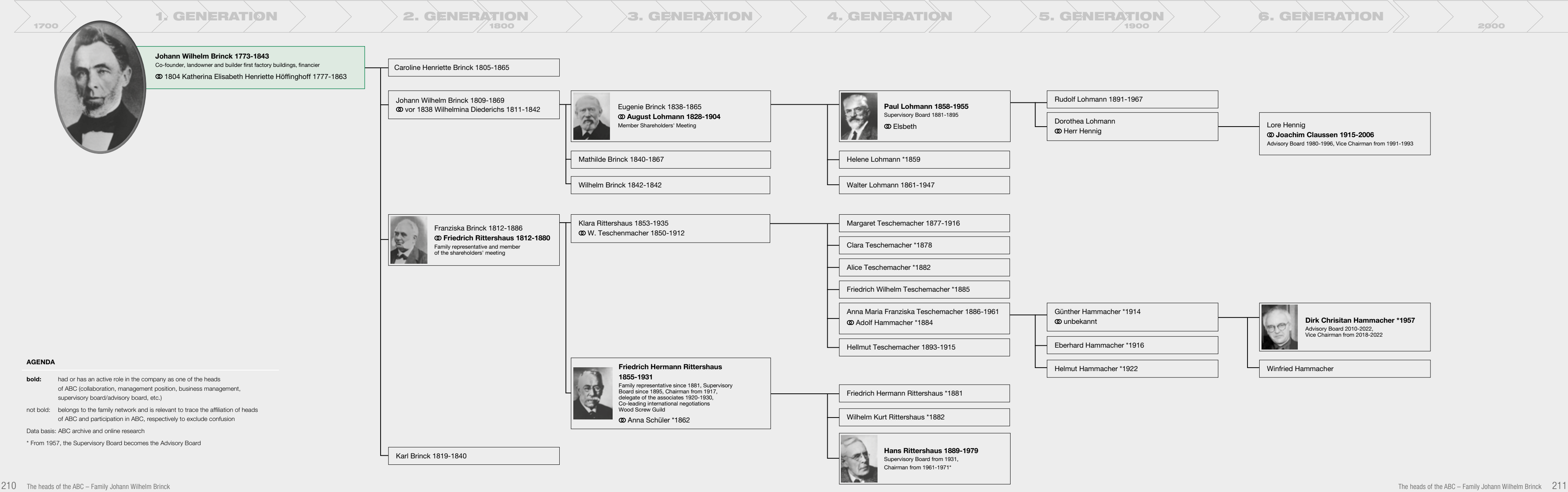
bold: had or has an active role in the company as one of the heads of ABC (collaboration, management position, business management, supervisory board/advisory board, etc.)

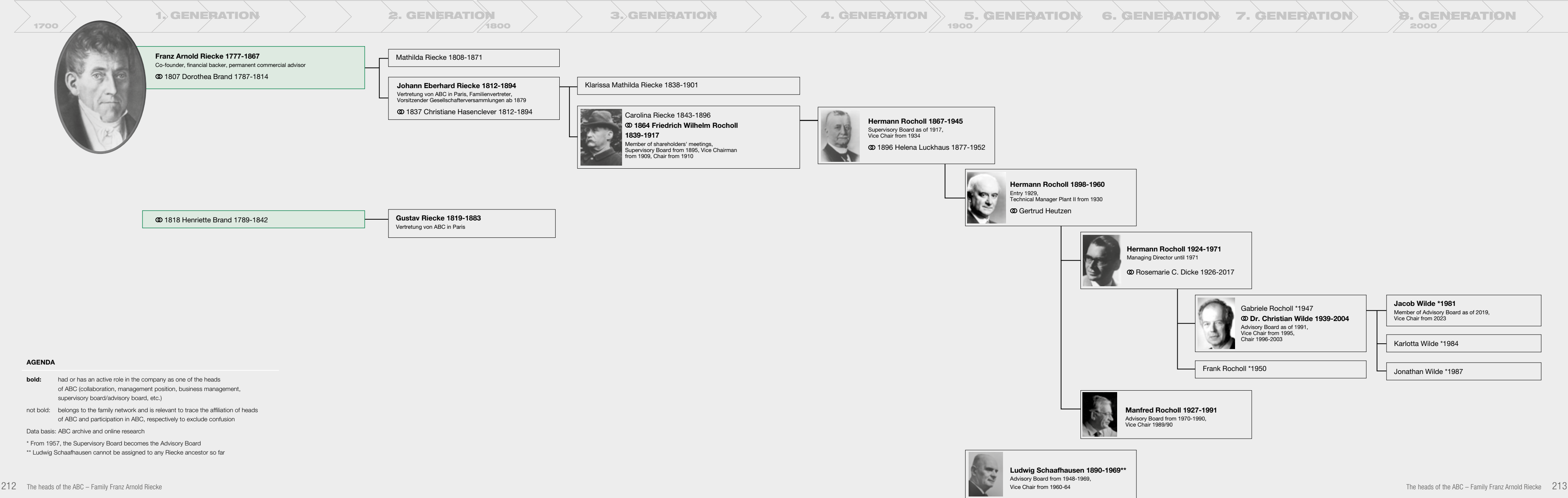
not bold: belongs to the family network and is relevant to trace the affiliation of heads of ABC and participation in ABC, respectively to exclude confusion

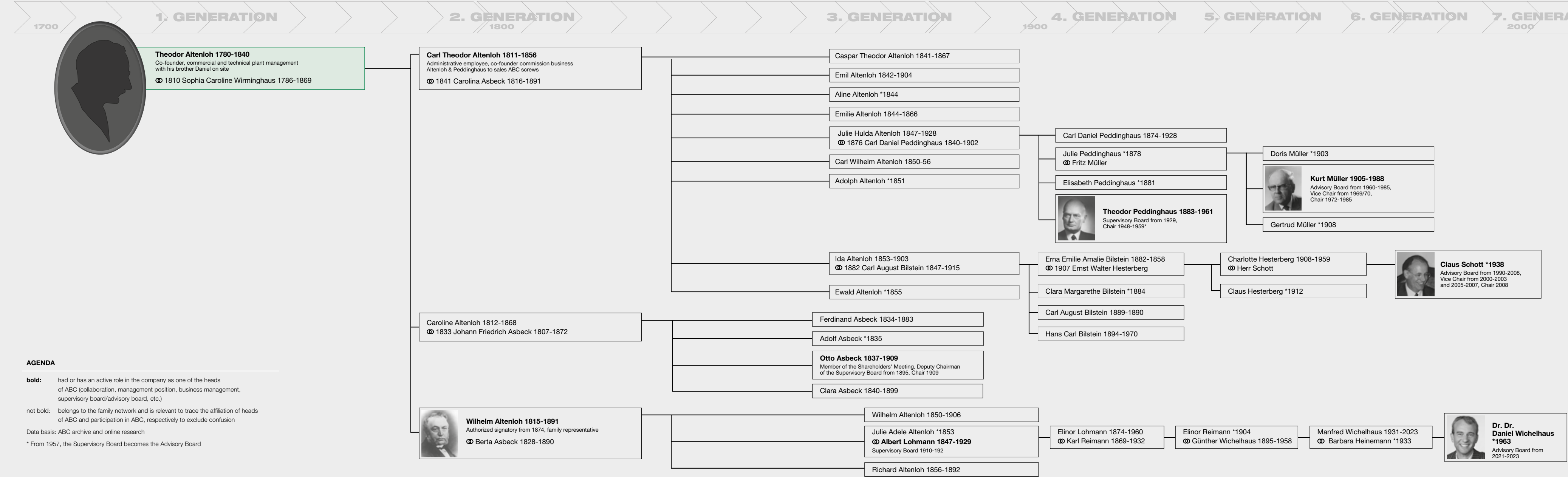
Data basis: ABC archive and online research

* From 1957, the Supervisory Board becomes the Advisory Board

** Agnes Wellershaus cannot be assigned to any Wellershaus ancestor so far









Johann Daniel Altenloh 1793-1851
Co-founder, commercial and technical management of the plant with his brother Theodor on site, construction of new machines, bookkeeping

⌘ 1824 Maria Louise Wirminghaus 1793-1871

Luise Altenloh 1824-1893

Ida Altenloh 1827-1892

**Emma Altenloh 1827-1894**
⌘ 1855 **Christian Heinrich Dicke 1826-1883**
temporary administrative employee

Elise Altenloh 1828-1898
⌘ 1866 **Eduard Asbeck 1832-1889**
Cooperation, family representative, authorized signatory from 1874

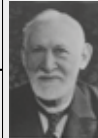
Daniel Altenloh 1830-1882

Hugo Altenloh 1837-1906
Member of the shareholders' meeting,
Chairman Supervisory Board as of 1895

Heinrich Dicke *1856

**Carl Robert Dicke 1857-1930**
Joined in 1884, Deputy Managing Director from 1895, Managing Director from 1920, Inventor wood screw machines
⌘ 1895 Mathilde Dulheuer *1869

Clara Dicke 1859-1916

**Eugen Dicke 1860-1945**
Member of the Supervisory Board from 1906, Vice-chair 1918-1920, Delegate of the shareholders 1931-1934, Chairman Supervisory Board as of 1934
⌘ 1886 Eugenie Gebuehr 1858-1900

Adolph Dicke 1862-1866

Elisabeth (Liese) Dicke 1897-1980
⌘ 1924 **Carl Dicke 1892-1974**
Joined in 1921, Authorized Signatory from 1922, Second Managing Director from 1930

**Robert Dicke 1899-1977**
Joined in 1923, Technical Manager Plant I from 1930
⌘ 1924 Margarete Vitense 1905-1997

Rosemarie C. Dicke 1926-2017
⌘ **Hermann Rocholl 1924-1971**
Managing Director until 1971

Adele Dicke *1887

Eugen Dicke 1891-1916

**Carl Dicke 1892-1974**
Joined in 1921, authorized signatory from 1922, second managing director from 1930
⌘ Elisabeth Dicke 1897-1980

Thea Dicke *1895

Eugenie Dicke *1900

**Robert Dicke 1930-2005**
Joined the company in 1959, Managing Director 1971-2003, Chair Advisory Board 2004-2005
⌘ 1961 Krista Körner *1942

Dr. Kristian Dicke 1963-2001
Was employee for 3-4 years

Markus Dicke *1965

**Nikolas Dicke *1968**
Managing Director USA 2001-2007 and 2018-2023, Managing Director SABEU 2010-2018, Managing Director ABC from 2023

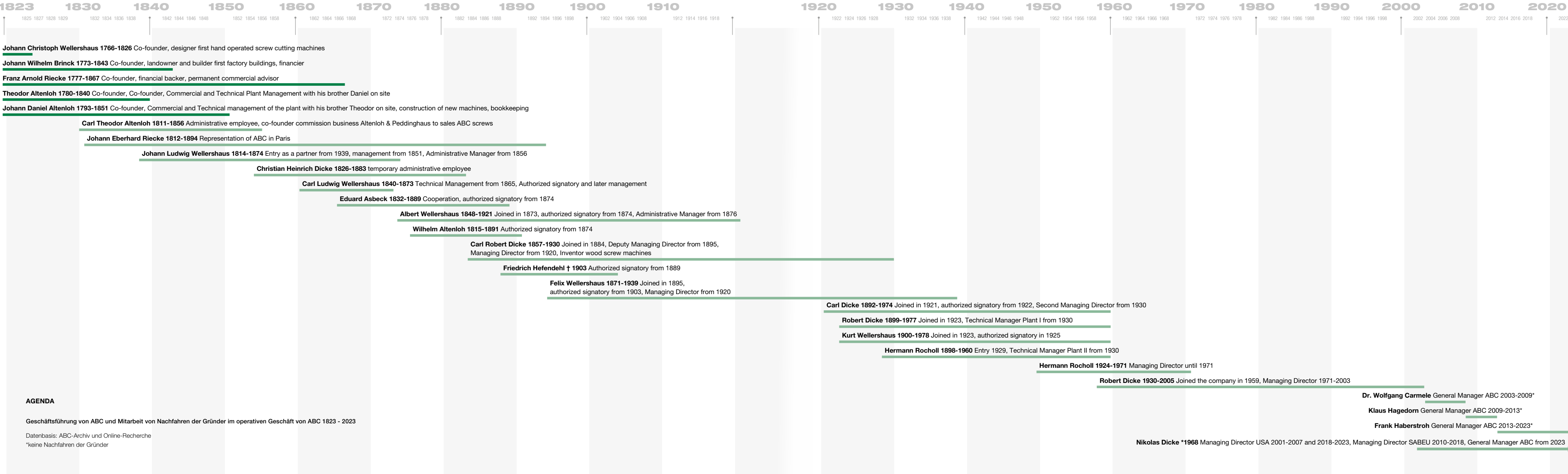
**Doris Dicke 1930-2017**
⌘ **Günter Schön 1918-2014**
Advisory Board from 1971-1999, Vice Chair from 1975-1985 and 1996-2003, Chair 1989-1995

Dr. Andreas Schön *1956
Advisory Board from 2008-2018, Vice Chair from 2013-2017

AGENDA

- bold:** had or has an active role in the company as one of the heads of ABC (collaboration, management position, business management, supervisory board/advisory board, etc.)
- not bold: belongs to the family network and is relevant to trace the affiliation of heads of ABC and participation in ABC, respectively to exclude confusion
- Data basis: ABC archive and online research
- * From 1957, the Supervisory Board becomes the Advisory Board

Managing Directors from formation until now



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