



The Kupfer & Glaser glass dynasty and the Frankenreuth glass foundry

by Dr. Michael Müller, translated by P.S.

At the turn of the 19th and 20th centuries a comprehensive change took place in the production method for flat glass.¹ The cylinder process using a blowpipe, practised for centuries, was gradually replaced for mirror glass by the casting and rolling process (e.g. Bicheroux Process), and for glass sheets by the so-called drawing process (e.g. the Fourcault and Libbey-Owens processes).

The economical production of flat glass now required increasing technical competence and high innovation. Capital in unprecedented amounts was required for the construction of new and the expansion of old plants and the provision of housing for the employees. Moreover, despite increased competition, the flat glass business was distinguished over a long period by high profitability. Family businesses were increasingly becoming corporations. In particular, public companies began to produce increasing volumes and to run innovative methods and machines, for example the *Manufactures des Glaces et Produits chimiques de St. Gobain, Chauny & Cirey* [St. Gobain, Chauny & Cirey Mirror and Chemical Manufacturing Company Limited] with their works in Stolberg and Mannheim and at numerous French sites. Belgian competition also played an important role as European flat glass producers through the *Société Anonyme des Glaceries de Saint-Roch, Saint-Roch-Auvelais*.

Against this background, the Jewish glass entrepreneurial families Kupfer and Glaser, who owned the Frankenreuth glass foundry until 1905, had to prove themselves. After 1905, their fate was decided in the *Bayerische Spiegel- und Spiegelglas-Fabriken Aktiengesellschaft* [Bavarian Mirror and Mirror Glass Manufacturing Co. Ltd.] of Fürth.

The Kupfer and Glaser mirror glass business: Overview of glass foundries in Bohemia and the Upper Palatinate

Glass foundries in Bohemia and the Upper Palatinate have a centuries-old tradition, producing flat glass amongst other things. In 1857 there were in Bohemia 83 glass works with 107 furnaces and 774 pots.² Around 1890 there were already 105 glass furnaces and about 3,000

grinding and polishing works with 24,000 workers.³ The emphasis was on the manufacture of crystal glass and hollow glass and on glass accessories.

The growing influence of Jewish entrepreneurs in the production of sheet and mirror glass in Bohemia since the mid-19th century can be attributed to the attractiveness of the industry, but was very much a consequence of the achievement of civil equality for Jews in Austria-Hungary in 1867, and in Bavaria and the German Empire in 1871.

There is evidence of 9 flat glass foundries in the Upper Palatinate in 1850; by around 1886, the number of glass foundries was about 15.⁴ Flat glass was the principal product here. Many glass foundries were in the hands of Jewish businessmen such as S.S. Arnstein, J. Bach, Bloch Brothers, L. Bloch, E. and A. Kupfer and S. Glaser. Overall, there were 62 glass foundries in the Kingdom of Bavaria by about 1886, including 49 in the Upper Palatinate, Upper Franconia and Lower Bavaria. The number of grinding and polishing works was in the hundreds, many of which were operated by Jewish businessmen, particularly those who were based in Fürth.

Kupfer and Glaser: first activities in the glass business

The families of Alois Kupfer, Moritz Kupfer and Hermann Glaser, with their sons and sons-in-law, formed a dynasty of sheet and mirror glass manufacturers who managed glass foundries and grinding and polishing works - both owned and leased - in the Upper Palatinate, in neighbouring Bohemia, and later in Salzburg and in Galicia from the early 19th century. There were close family ties through marriage. Business ties existed since the mid-19th century through the partnerships of M. & A. Kupfer (Moritz and Alois Kupfer), E. & A. Kupfer (Eduard and Alois Kupfer), and Kupfer & Glaser (Alois Kupfer, Eduard Kupfer and Sigmund Glaser).

The first activities of the families of Kupfer and Glaser in the glass business are largely obscure.⁵ The names of both families are first mentioned in 1832 as tenants of a glass foundry in the Elbogen District. Around 1837, there were about 75 glass foundries in 14 of the 16 administrative Districts in Bohemia, of which close to 60% were involved in the manufacture of sheet and mirror glass.⁶ Only a handful had Jewish tenants. In the Elbogen District the statistics in this case show six glass foundries, predominantly producing flat glass. Abraham Kupfer and Jacob Glaser appear as tenants at Tyss, Dominium Chiesch. The tenant at Schlöbles, Dominium Luditz, was also Abraham Kupfer. In 1845, Hermann Glaser ran a glass foundry at Krukanetz, east of Tachau in Pilsen District.⁷ The genealogical links between these

three entrepreneurs and the above-named require further clarification on the basis of birth, marriage and death certificates.⁸

The firms of M. & A. Kupfer and E. & A. Kupfer

There is evidence of the first business connections between Moritz Kupfer and Alois Kupfer in the 1850s. The partnership of M & A. Kupfer was formed on 1 September 1859.⁹ The sole signatory for the firm at that time was the 32-year-old Alois Kupfer.¹⁰ Moritz Kupfer was 60 years of age. The registered office was at Frankenreuth (Upper Palatinate, Kingdom of Bavaria), where Alois Kupfer was a glass manufacturer. In about 1870, he moved his residence to Vienna.

Moritz Kupfer's only son Eduard had worked in the firm since 1866¹¹ but it was not renamed E. & A. Kupfer until 1883. Eduard Kupfer was the firm's representative in Frankenreuth. The registered office of E. & A. Kupfer was moved to Moosburg / Weiden in 1893; a branch office remained in Frankenreuth. The partnership of E. & A. Kupfer also did business in Austria-Hungary, mainly in Bohemia, where the company was legally recognised.

The firm of Kupfer & Glaser

The firm of Kupfer & Glaser is a multifaceted entity. Its name occurs in Austria-Hungary and Bavaria in various production locations and branches. For customers and prospective customers, the brand Kupfer & Glaser meant competence and continuity in the sheet and mirror glass business.

Kupfer & Glaser, Mirror and Sheet Glass Factories, was registered on 13th January 1874 as a partnership in the Commercial Register of the Pilsen District (Bohemian branch) and from 24th March 1874 was also registered in Vienna.¹² From 31st August 1883 it appears as a partnership based in Furth im Wald (Bavarian branch).¹³ The partners in each case were Alois Kupfer (Vienna), Eduard Kupfer (Frankenreuth) and Sigmund Glaser (Fichtenbach / Bystrice). They had however been running joint projects since the late 1860s and early 1870s.

The family ties

Typical of Jewish families in the period under consideration were the close bonds between families, privately through marriage ties, professionally through business partnerships. In this way, responsibilities and mutual trust, financial dependency and risk were shared transparently between the parties. The following is a brief overview of the family ties¹⁴:

Moritz Kupfer (ca. 1799 - 1876) was a glass manufacturer in Chiesch, Luditz Parish, Eger District. He lived in nearby Tyss.¹⁵ His only son Eduard Kupfer (1839 - 1907), born in Tyss, was married to Franziska Glaser, a daughter of Hermann Glaser.

Of Eduard Kupfer's five sons, four, namely Heinrich (1871 - 1922), Otto (1873 - 1942), Moritz (1877 - 1942) and Robert (1883 - 1941), were in leading positions in the flat glass industry. Otto, Moritz and Robert Kupfer were murdered in concentration camps.


Alois Kupfer (1827 - 1905), born in Tisahutte near Weseritz, Tachau District, was first married to Johanna, and secondly to Josephine Kupfer, sisters of Eduard Kupfer. Alois and Eduard Kupfer were therefore brothers-in-law.¹⁶ Four of his five sons, Julius (1854 - 1886), Max (1866 - 1942), Adolph (1869 - unknown) and Hermann (1870 - 1934) were in the family glass business. Max Kupfer was murdered in a concentration camp.

Hermann Glaser (18?? - approx. 1881) had five sons, two of whom, Sigmund (1845 - 1926) and Ignaz (1853 - 1916), were glass manufacturers, the latter very successful. Sigmund Glaser, married to Alois Kupfer's sister Marie, was thus his brother-in-law. Ignaz Glaser married Alois Kupfer's daughter Emilie and so was his son-in-law. Ignaz Glaser's son, Hermann (1889 - 1956) succeeded his father as a glass manufacturer in Bürmoos / Salzburg and later in Brüx. From 1939 to 1947 Dr. Hermann Glaser lived in exile in Shanghai.

The works and offices

In 1887, Kupfer & Glaser and E. & A. Kupfer operated 11 works in Austria and 20 in Germany.¹⁷

They had many glass furnaces in Austria, i.e. mainly in Bohemia, but in the Upper Palatinate, Bavaria, the grinding and polishing works dominated. In other words, best use was made of the geographical resources of forests and watercourses. Where an opportunity to lease or purchase existed, the basic criteria for site selection were an adequate long-term energy supply, a competent workforce and optimal logistics for materials and finished products. The proximity of glass furnace and grinding and polishing works was beneficial. For energy - preferably on site - they used wood, peat, coal and water power. Wood also ensured the production of potash. Quartz sand was more or less omnipresent. Later, railway lines or closeness to them ensured supplies of raw material at competitive prices.


 K. u. k. LADESBEF.

Haupt-Depôt für
UNGARN:
Budapest
 VI. Waitznerstrasse Nr. 21
(Industriehof).

Telegramm-Adresse für Oesterreich-Ungarn:
Kupfer Furth Walde
(Westbahn).

Spiegel- und Tafelglas-Fabriken
Kupfer & Glaser

Haupt-Depôt für Oesterreich:
 VI. Rahlgasse 3 **WIEN** I. Krugerstrasse 4.

Haupt-Depôt für
DEUTSCHLAND:
Fürth
 MAXSTRASSE.

Telegramm-Adresse aus dem Deutschen Reich:
Kupfer Furth Walde.

Fabriken in Oesterreich:

- Fichtenbach
- Goldbach
- Neufürstenhütte
- Kollerhütte
- Sorghof
- Bürmoos
- Bras
- Reichenthal
- Frauenthal
- Waldheim
- Tachau.

Fabriken in Deutschland:

- Furth im Walde
- Frankenreuth
- Galsterloo
- Neuenhammer
- Schmittlerwerk
- Hagenmühle
- Schafbruckmühle
- Finkenhammer
- Berglerwerk
- Lohma
- Gröbenstädt
- Leinschlag
- Treibetz
- Hebermühle
- Schönau
- Schönsee
- Nittenau
- Neustadt a. d. W. N.
- Kaibitz
- Wondreb.

Fichtenbach, den 18. Juni 1887.
bei Furth im Walde.

Ihr Wohlgeboren!

In angelegender Empfehlung Ihrer
 gütigsten Zuschrift vom 14. d. d. d. bairisch, die ich
 Ihnen die vorgabene Mitteilung zu machen, dass
 die in Vorliege erwähnten Pläne bereits aufgegeben
 den Abbruch sind, die Laufe der hiesigen Tage
 in neuem Papier gelassen sollen, auf deren
 Empfehlung Ihnen selbst zu geben lassen werden.

Mit aller Hochachtung
 Kupfer Glaser

Klatten

Figure 1: Kupfer & Glaser business letter dated 1887 with a list of all the factories in Austria-Hungary and Germany

The Austrian works¹⁸ were: Fichtenbach (GH), Goldbach (GH), Kollerhütte (GH), Sorghof (GH), Bürmoos (GH), Reichenthal (GH), Frauenthal (GH), Neufürstenhütte (SP), Waldheim (SP), Bras (GH?) and Tachau (SP?). The German works were: Furth im Wald (GH), Frankenreuth (GH), Galsterloh (SP)¹⁹, Neuenhammer (SP), Schmittlerwerk (SP), Hagenmühle (SP), Finkenhammer (SP), Berglerwerk (SP), Lohma (SP), Gröbenstädt (SP), Leinschlag (SP), Tra-

bitz (SP), Hebermühle (SP), Schönau (SP), Schönsee (SP), Nittenau (SP), Neustadt an der Waldnaab (SP), Kaibitz (SP) und Wondrebhammer (SP).

In the next 10 years to 1897 there was a further expansion of the firms of E. & A. Kupfer and Kupfer & Glaser. At this time, the two firms had three glass foundries and 20 grinding and polishing works in Bavaria, and nine glass foundries and about 20 to 25 grinding and polishing works in Austria-Hungary.

So how were sales dealt with? Kupfer & Glaser essentially ran the businesses in the territory of the Austro-Hungarian monarchy. Branch offices of the firm, most of them simply sales offices, can be shown to have existed in Vienna, Prague, Brno, Budapest, Lvov, Tarnau / Tarnow and Trieste.²⁰ The main depot for Austria was in Vienna, that for Hungary in Budapest. The branch in Prague also had a significant position. In addition to the firms' branch offices, they also had agents acting for them.

The firm of E. & A. Kupfer transacted business in Bavaria, Germany, Western Europe and overseas exports. The Fürth branch as the main German depot was responsible for this, with Karl Löwy (1838 - 1911) as manager. He was married to Franziska Kupfer, a sister of Eduard Kupfer.

A total of about 900 to 1000 people can be said to have been employed in the various works by 1897. In addition there were an estimated 50 - 100 employees in management and sales, as well as many agents.

The Frankenreuth glass foundry

The economic focus of the firms' activities since the 1860s was the lease and / or purchase and operation of glass foundries and grinding and polishing works. It is noteworthy that the glass foundries in the Upper Palatinate and Bohemia were almost never new constructions. With a good feel for suitable opportunities, the foundries were acquisitions of existing production facilities, which were extended and modernised after purchase. In this way, use could always be made of the available pool of labour. Managers were either family members or trusted people with whom the firms had worked for years.

Purchase and operation

The first major foundry project of M. & A. Kupfer was at Frankenreuth, which the landowner Johann Baptist von Schedel had run himself until 1850²¹. Gressmann & Co. then leased the foundry for six years until 1856, when first Alois Kupfer, then Moritz and Alois Kupfer took over the lease²².

After the son Adolph von Schedel had taken over the Frankenreuth estate²³ (consisting of the manor house and 11 houses) for 98,467 fl. (= guilders), he became the new landlord of Alois and Moritz Kupfer. The leased premises were the glass foundry²⁴ (No. 14 and 14 ½), the manager's house (No. 13) and glassmakers' accommodation. The crushing house in Grafenau was also included in the lease²⁵. On 14th January 1863 they bought substantial parts of this factory complex (glass smelting house, manager's house, two houses for workers and the crushing mill) with an area of 130,000 – 140,000 sq.m. for 18,800 fl. Adolph von Schedel was probably in need of cash, for a short time later he sold a further 115 hectares of agricultural land and forest to the municipality for 35,000 fl.

On 13th May 1864 Alois and Moritz Kupfer bought three further houses (Nos. 1, 9 and 10) for 15,666 fl., including the manor house, house No. 1 and appurtenant land²⁶. This increased the area by 47 ha. In spring 1865, Moritz Kupfer's half share of the property went to his son Eduard. The Kupfers acquired three further houses: house no. 3 in 1883, house no. 4 in 1885, and in 1900 house no. 15, a brewery with the rights to brew and sell beer, for a total of 28,000 Marks. The brewery and inn at a purchase price of 22,650 Marks was the most expensive property.



Figure 2: Plan of Frankenreuth in 1836 with the manor house (left) and the glass foundry house no. 14, 14½ and 13 (top right)

In 1863 – i.e. immediately after purchase of the glass foundry – there were extensions to the core of the old foundry with a new glass furnace, two stretching furnaces and two drying furnaces together with living accommodation, constructed in wood with solid roofs.²⁷ Production at that time was on a grand scale. In about 1870, about 195,000 unprocessed sheets of glass were delivered to the grinding and polishing works at Burgtreswitz, Gröbenstädt, Hammermühle, Leinschlag and Strehberg.²⁸ Except for Leinschlag, which belonged to the Kupfers, the works mentioned were owned by third parties, so there was a close partnership between foundry owners and the operators of grinding and polishing works in the area. Little is known about the contractual relationships between mirror glass buyers, producers of unprocessed glass and grinding/polishing plant operators - who contracted with whom for which goods / services.

Extensions and renovations took place in Frankenreuth in 1882.²⁹ A new glass furnace was constructed in a separate building (10 x 7.5 metres, with basement and ground floor) next to the glassworks and a new chimney (26.3 metres high) erected. In the mid-1880s the works had two furnaces (Siemens system) and 14 open pots with a staff of about 70. The estimated annual production value was about 200,000 Marks.³⁰ Two new houses of workers' accommodation were amongst other things built in 1887, an indication that business was satisfactory.³¹ Amongst others, Josef Kupfer, a member of the family,³² was a long-serving factory manager in Frankenreuth. He died in 1898 of gas poisoning.³³ His successor was Max Kupfer, who however was barely able to fulfil the requirements of the post.³⁴ He held this position for only a few years. Later and last managers up to the sale/demolition of the works after 1936 were Michael Mack Sr.³⁵, and finally Wilhelm Wenzl³⁶. Michael Mack Sr. had previously managed the Furth glass foundry, probably until 1906. His son Michael Mack Jr. had been manager at Seligmann Bendit & Sons in Marktredwitz since 1908.

Frankenreuth as a focus of activity

Frankenreuth was the focal point of Alois Kupfer's life from 1856. Seven of his eight children were born here.³⁷ It is not clear where he and his family lived before the acquisition of the manor house. With the purchase of Schedel's manor house in 1864 the family lived in a large, prestigious estate, which also provided the necessary space for business. Here they could enjoy their entrepreneurial success and acquired wealth and display them to the outside world.

When Alois Kupfer moved to Vienna in 1870, Eduard Kupfer succeeded him as proprietor in Frankenreuth until shortly before 1900.³⁸ He had married in 1865 (in Prague!) and since that time also lived in Frankenreuth.³⁹ The first daughter Johanna was born in Frankenreuth in

1866, as well as her eight younger siblings. [According to family tradition, Eduard and Franziska Kupfer had 13 children. There is evidence of 12, of whom 10 survived to adulthood.]



Figure 3: The manor house in Frankenreuth at the turn of the century

A feature of the manor house in Frankenreuth was a private synagogue installed by the Kupfers, which was also attended by their co-religionists living in the area.⁴⁰ The Kupfers themselves were members of the Jewish community in Floss.⁴¹ On the business-commercial side, the Kupfers were included amongst the leading personalities of the Industry, respected and accepted, far beyond the borders of Bohemia and Bavaria. There is no evidence as to their general social acceptance. Nevertheless, Eduard Kupfer was towards the end of the 19th century awarded the title of Kommerzienrat [Commercial Counsellor] for his economic and social commitment.

Co-existence with the Christian workers in the glass factory followed the practice of the times.⁴² The cooperation with the glass workers was clearly characterised by a strict relationship of trust. They were loyal to the patriarchs, the guarantors of their employment and landlords of their accommodation. That however did not exclude disputes over pay and working conditions. In evaluating this partnership, it must be borne in mind that with any glass foundry – as in Frankenreuth - large parts of the village community were dependent on the glass masters, in the case of the grinding and polishing works almost exclusively so. Other jobs were scarce.

The form and intensity of the exercise of the Christian religious confession was left to the discretion of the workers and their families. The directing influence of the appropriate, pre-

dominantly Catholic, priests was valued and encouraged, as this influence was an advantage to social peace. Financial support for church building etc. was consequently customary.⁴³



Figure 4: The former Frankenreuth manor house in 2011

The end of collaboration

During a period of around 50 years ending in 1899, Alois and Eduard Kupfer and Sigmund Glaser had built up a company which was remarkable for its time. However, so far as the sustainability of the business is concerned, Sigmund Glaser's brother Ignaz commented at around that time, *They had run a substantial business for 25 years without ever accounting between themselves. They imagined they had millions and yet were unable to pay the most pressing debts.*⁴⁴ A balance sheet at 1st August 1898 showed capital of 500,000 fl., much too small for the size of the business.⁴⁵ A reasonable value would have been in the order of 3 million fl.⁴⁶ The trust which had kept the three partners together for decades was now quickly lost. The end of their collaboration and a division of the assets of the business had become inevitable. Differences over a joint continuation of the business could not be bridged. The agreement was as follows⁴⁷:

- Alois Kupfer takes the entire Austrian business of the firm of Kupfer & Glaser, along with any liabilities, as well as the Frankenreuth estate of E. & A. Kupfer with three polishing works; on the other hand, he owes Eduard Kupfer about 6-700,000 fl.

- Eduard Kupfer takes the rest of the firm of E. & A. Kupfer with all its cash, and the 6-700,000 fl. mentioned above, secured by mortgage, in cash from Alois Kupfer.
- Sigmund Glaser, whose assets in the above two firms are guaranteed by 300,000 Marks, takes the entire Bavarian business of the firm of Kupfer & Glaser.

Ignaz Glaser evaluated this agreement as follows: *Eduard's share is the best. The man has kept a nice business, has actual cash and furthermore a mortgage of about ¾ million Marks from Alois. - Sigmund is to be pitied. After 25 years of trouble he really has nothing and must start all over again. He may be pleased to be finally free.*⁴⁸

By a property transfer agreement dated 28.4.1899, Alois Kupfer took the complete Frankenreuth glass foundry complex with associated workers' housing, houses Nos. 1 and 3 in Grafenau, Berglerschleif and Schafbrucks Mühl at the price of 174,550 Marks for the immovable property and 70,680 Marks for the movable property⁴⁹. Alois Kupfer's son Max was appointed factory manager on site. He was a man of limited entrepreneurial capabilities, as is evidenced in contemporary sources⁵⁰.

Rescue for Frankenreuth: a merger with the firm of W. Bechmann, Fürth

The strained financial situation of the firm of Kupfer & Glaser, Vienna, through which Alois Kupfer and his sons carried on the mirror glass business, was to be revealed at a factory and business inspection in October 1900.⁵¹ The dwellings for the workers were insufficient in size and quality. The rules of employment (working and rest times) for children and young people⁵² in the glass foundry were not being adhered to and the work records of the employees were missing. The age and dilapidated state of the glass foundry was also criticised. Remedy was required in all matters. Max Kupfer's laconic comment at the beginning of 1901: *We must therefore politely request the Royal District Council to spare us this sort of proposal, as the current miserable business conditions are unsuited to expending or rather wasting the small working capital of the business on this kind of demand. Yours faithfully, KupferGlaser.* Eventually Max Kupfer was taken to the Royal Administrative Court at Vohenstrauß, which on 14th May 1901 fined him 210 Marks for infringements of the Business Regulations.



Figure 5: The Frankenreuth glass foundry about 1908

No fundamental improvements to the property occurred in the period following. When the Waidhaus local police authority inspected the glass works in April 1902, the official engineer noted that parts of the foundry had already collapsed or threatened to do so, and thus there was a danger to life and limb. The condition was obviously so disastrous that short-term measures had to be taken. From Weiden, Eduard Kupfer intervened to ensure that defective parts of the glass foundry were demolished. After an inspection by insurers, the fire insurance was reduced by 27% to 9,130 Marks. That was the residual value of the once proud and valuable mirror glass foundry!

During the following years it proved impossible to bring the firm of Kupfer & Glaser into calmer economic waters and to revitalise the business in Austria-Hungary. In the meantime, Alois Kupfer had become seriously ill, his sons were no entrepreneurs and his creditors demanded the repayment of their loans.

Now Eduard Kupfer provided his brother-in-law with the assistance decisive for the continued existence of Frankenreuth. As the first step, his firm Eduard Kupfer & Sons⁵³ took over the Frankenreuth glass foundry complex on 9th January 1905 from Kupfer & Glaser for 217,690 Marks immobile property value.⁵⁴ By a contract dated 16th March 1905, Eduard Kupfer then introduced the glass foundry at an estimated 319,375.77 Marks immovable property value and 1,000 Marks movable property value, as his financial contribution⁵⁵ to the newly-founded Bayerische Spiegel- und Spiegelglas-Fabriken AG, formerly W. Bechmann, formerly Ed. Kupfer & Sons, with registered office in Fürth. He further introduced five grinding and polishing works (Schafbruck, Bergerschleif, Galsterloh, Dimpfl / Georgenberg and Hammer-

mühle)⁵⁶. The business partners of Eduard Kupfer were Louis and Meier Bechmann, the owners of the firm of W. Bechmann of Fürth. The contribution of the firm of W. Bechmann consisted of its business premises in Fürth and its grinding and polishing works. And from both sides came – as respective goodwill value so to speak – their existing business connections, which were to ensure continued sales.

The Directors of the limited company were Hugo Bechmann⁵⁷, Moritz Kupfer and Emanuel Löwy⁵⁸, all well-known and respected Jewish businessmen in the mirror glass industry. The ten members of the supervisory board included amongst others the patriarchs⁵⁹ Louis and Meier Bechmann, Eduard Kupfer and his son Heinrich Kupfer.



Figure 6: Portrait of Eduard Kupfer

Apparent consolidation and subsequent collapse

During the next few years a kind of normality resumed for the glass foundry under the aegis of the new company and its new management. The necessary measures for its operation were taken, although no fundamental renovation took place. The manor house and its ancillary farming operation were leased out in order to remove the burden from the glass operation.

However, Frankenreuth was threatened only a short while later with in-house competition from the glass foundry at Furth im Wald, which had found a place as supplier of sheet glass and unprocessed mirror glass as a leased works under the aegis of Bayerische Spiegel- und Spiegelglas-Fabriken.⁶⁰ This works was more modern and efficient than Frankenreuth. The works' manager was Ernst von Grafenstein, whose family had business connections with Eduard Kupfer.⁶¹ The integration of this glass foundry into the new undertaking in 1907 was Eduard Kupfer's last entrepreneurial move. This outstanding industrialist died in Weiden on 7th February 1907. – The flotation of Bayerische Spiegel- und Spiegelglas-Fabriken AG on the Frankfurt am Main stock exchange took place in 1911 at a price of 131 Marks per share. Frankenreuth's economic vulnerability to permanent changes became clear at the outbreak of the First World War in 1914. Firstly, the Bayerische Spiegel- und Spiegelglas-Fabriken AG could pay no dividend in 1914. Like many of its competitors, the company was suffering from shortage of raw materials, especially the constantly decreasing coal rations ordered by the Imperial Coal Supply Commission in Berlin. During the course of the war, Frankenreuth's production had to be reduced from eight to six pots.⁶² The Furth im Wald glass foundry was switched to the production of optical glass. That had a knock-on effect on the employment situation in the grinding and polishing works and in the faceting and coating works of the mirror glass business.

In 1918 the manor house with extensive landholdings, together with houses nos. 9 and 15, was disposed of to the Darlehenskassenverein der Pfarrei Pfatter [a local savings bank] for the sum of 256,000 Marks.⁶³ During the next few years, the bank made further disposals to private purchasers. So for example on 23rd January 1919, Josef and Margarete Voit acquired a dwellinghouse adjacent to the manor house as well as some agricultural land.

In order to modernise the business, a machine house with its own electricity supply was built around 1921. The company sold further land in Frankenreuth in 1922, before beginning construction of new workers' houses in 1923. At the same time in spring 1923, plans for the complete modernisation of the glass foundry came to fruition.⁶⁴ The plan was to move away from mirror glass to another type of production, presumably sheet glass. The project proceeded in a somewhat haphazard way, also caused no doubt by the raging inflation and efforts to retain its advantages. In September 1923, the old dilapidated wooden structure was demolished. Immediately afterwards a start was made on the new construction, without producing approved building plans. The Gewerberat [Trade Council] in Regensburg complained about this action. Bezirksamt Vohenstrauß [the local authority] demanded building plans from Wilhelm Wenzl, the Frankenreuth Works Manager, which he produced in October. These

plans were approved by a Gemeinderat [parish council] resolution in Waidhaus on 13th October 1923 and confirmed by the Bezirksamt a little later. The estimated building costs were 80,000 gold Marks (!). The massive new buildings were to consist of a glass furnace with four swing trenches for the blowing of glass cylinders, a tempering and drawing furnace as well as storage chambers for salt, soda, calcium, sand and of course coal, and a cutting room with packing room next to it.⁶⁵

Because of the hyperinflation, the year 1923 was financially very risky. For that reason the balance sheet for 1st January 1924 was recorded also in gold Marks, with a provision of 2,307 million gold Marks for land and buildings. The *Rentenmark* had yet to become fully established.

During the course of 1924 economic normality returned. But now consolidation was again announced. It occurred step by step over many years. From 1923 to 1927 no dividends were paid. However setbacks still occurred.

Right from the start, the new glass foundry, completed in 1924, failed to fulfil the hopes that it would be a modern profitable concern.⁶⁶ On 25th May 1926, a few days before the decision to close the glass foundry on 30th May, the works manager Geist – suspecting bad news – reported to Mayor Glaser of Waidhaus the serious structural defects in the works: incorrect construction of the furnace and insufficiently high chimneys causing waste of energy, problems in smelting with streaky glass, incorrect use of sodium or sodium sulphate. These problems were known, but evidently there was a lack of will amongst those concerned, both on site and at the headquarters in Fürth, to carry out an in-depth analysis to get to the bottom of the causes and to seek help. The closure could no longer be avoided, affecting an estimated 50 to 60 employees.

As late as the beginning of December 1926, Mayor Glaser took the initiative and sounded out the Otto Perutz Dry Plate Factory⁶⁷ in Munich as to whether they had any interest in taking on a lease of the works. He was concerned about the fate of the unemployed workers. A negative reply arrived a few days later. At the same time Glaser contacted Moritz Kupfer, who had left the board of Bayerische Spiegelglasfabriken and was now working for Seligmann Bendit & Sons in Marktredwitz.⁶⁸

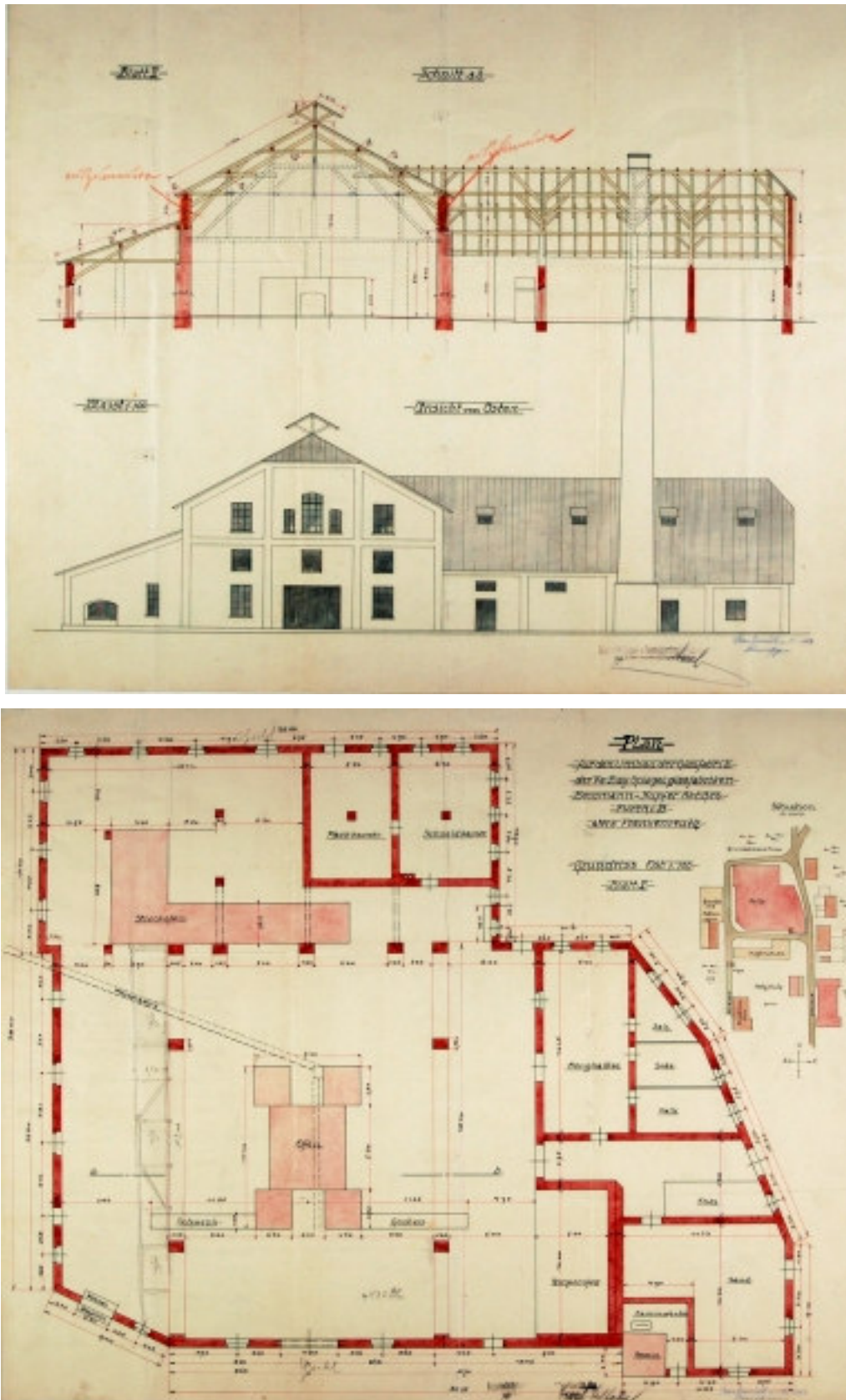


Figure 7: The new glass foundry of 1923; plan with section and drawing (above) and plan and location plan (below)

Moritz Kupfer declined to take over the business personally, but – in view of his connection with Frankenreuth – promised to look for interested parties. Use of the foundry as a sheet

glass factory was discussed. The seriousness of his efforts to keep the foundry going are emphasised by an exhaustive calculation of the economics as well as intensive discussions with industry experts. The facts discovered led in early 1927 to the conclusion that there appeared to be no economically viable solution for Frankenreuth and hence there were no interested parties.

In mid-1928 the Board of Bayerische Spiegelglasfabriken approached the Parish of Waidhaus in relation to an acquisition of the works. Ferdinand von Grafenstein, company chairman, had intensive discussions with the parish. In October 1928 an offer of 153,000 Reichsmarks for the entire property (apart from machinery and stock) was submitted to them. But what should Waidhaus do with the glass foundry?

Maintenance of the functionality of the glass foundry and necessary repairs to the factory buildings were now reduced to a minimum. In April 1929 minor maintenance work was carried out to houses nos. 3, 4, 6, 8, 11 and 13, as required by the parish. In the period 1930 to 1932 the company sold small numbers of workers' houses and so gradually reduced its connection to Frankenreuth. The sale of part of the works and one house to one Wenzl Stockl from Reichenthal in 1934 fell through because of his Czech nationality. The new German Reich [The Nazis came to power in Germany on 30th January 1933.] did not want any foreigners on its territory.

Thus the *Frankenreuth problem* was postponed from year to year. In January 1936 Waidhaus Parish Council received another offer to buy the glass foundry, this time the sum of 16,500 Reichsmarks was proposed. But there were others interested for this bargain price.

The Annual Report of Bayerische Spiegelglasfabriken AG dated May 1937 notes laconically: *We have been able to rid ourselves of the factory premises in Frankenreuth, which have not been required for the business for many years.* The glass foundry (No. 14) and two pieces of land, altogether 1.828 hectares, had been sold on 15th April 1936 to Michael and Joseph Leopold of Weiden for 15,000 Reichsmarks.⁶⁹ After decades of slow decline, the Frankenreuth chapter was finally closed. That was a *satisfactory* outcome in a difficult year for business, when a profit of only 16,121.04 Reichsmarks had been earned.

Clearance works

In 1936, the Olympic winter games took place in Garmisch-Partenkirchen and the summer games in Berlin. The Nazi government hoped to make propaganda use of this major event. Under the slogan *Olympics – a national project* Propaganda Minister Joseph Goebbels and Interior Minister Wilhelm Fricke put many measures in hand. These included well-maintained

buildings and clean streets all over the country. Foreign visitors must be impressed by work and life in the German Reich.

The Mayor of Waidhaus was instructed by letter to give Frankenreuth a bit of sparkle: *Right on the Czech border there are directly on the main road some factory buildings which give a distinctly poor impression and are completely derelict. Please let us know at your earliest convenience how you propose to remove this nuisance and when its eradication may be expected.*⁷⁰

Illustration credits

Fig. 1: Statni okresni archiv Domažlice se sidlem v Horšovském Tyně [Domažlice District State Archive, Horšovský Tyn]

Fig. 2: Marktarchiv Waidhaus, Katasterplan Frankenreuth [Waidhaus Archives, Frankenreuth land register plan], about 1836

Fig. 3: Old postcard of Frankenreuth

Fig. 4: Michael Muller, Fürth

Fig. 5: Old postcard of Frankenreuth

Fig. 6: P.S., Great Britain

Fig. 7: Staatsarchiv Amberg, Bezirksamt Vohenstrauß [Amberg State Archive, Vohenstrauß District Council], included in building plans 1863/1

Endnotes

- 1 Flat glass products are on the one hand mirror glass, on the other hand sheet or window glass. The special features of mirror glass are its distortion-free quality, combined with high transparency. These determined its high price until the introduction of the float glass process in the middle of the 20th century. Sheet or window glass on the other hand are products of lower quality.
- 2 Mittheilungen aus dem Gebiete der Statistik, Hrsg. Direction der Administrativen Statistik, K. K. Handels-Ministerium [Statistical Information, edited by the Department of Administrative Statistics, Royal Imperial Ministry of Trade], Vol. 6 , Part 1, Vienna 1857, p.58 and p.97.
- 3 Meyers Konversations-Lexikon, 4th Edition, Leipzig and Vienna, 1885 -1892.
- 4 Paul Winkler, Bayern's Spiegelglas-Industrie in der Jetztzeit und Vergangenheit [Bavaria's mirror-glass industry in the present and past], Fürth 1899, and Julius Fahdt, Deutschlands Glasindustrie, Verzeichnis sämtlicher deutschen Glashütten [Germany's Glass Industry, Directory of all the German glass foundries], 5th Edition, Dresden 1886.
- 5 In his diary, Hermann Glaser (1889 - 1956), a descendant of the Glaser family, writes that he is descended from an old Jewish family who received a German surname in the reign of Joseph II. His ancestor from that period had been a peddler in glassware. His brother dealt in metal items made of copper. Thus one got the name of Glaser, the other the name of Kupfer [=copper]. Despite recurrent disputes, the families of both brothers retained close family connections. See further Aus dem Tagebuch von Hermann Glaser [From the Diary of Hermann Glaser], in Alois Fuchs, ed., Bürmoos - ein Lesebuch, Berichte, Fakten, Dokumente und Bilder aus der Geschichte einer Gemeinde [Bürmoos - a reader, reports, facts, documents and images from the history of a community], Bürmoos 1992.

The naming mentioned by Hermann Glaser probably occurred in the context of the Decree of Tolerance issued by the Emperor Joseph II in 1782 as Holy Roman Emperor (1765 - 1790) and as King of Bohemia (1780 - 1790). It granted Jews more freedom in the practice of their religion, but obliged them inter alia to accept a German family name (abandoning the practice of patronymic names).

- 6 Schematismus für das Königreich Böhmen auf das gemeine Jahr 1837, Hrsg. Königlich böhmische Gesellschaft der Wissenschaften [Information for the Kingdom of Bohemia for the year 1837, pub. Royal Bohemian Society of Sciences], Prague 1837, pp. 626 – 630.
- 7 Handbuch des Königreichs Böhmen für das Jahr 1848, Hrsg. Böhmisches Gesellschaft der Wissenschaften [Manual of the Kingdom of Bohemia for the year 1848, pub. Royal Bohemian Society of Sciences], Prague 1848, p. 606.
- 8 Abraham Kupfer is clearly the father of Joseph Kupfer, later the manager of E. & A. Kupfer in Frauenthal and Frankenreuth. Hermann Glaser is probably the ancestor of the Glaser family of glass entrepreneurs (see below).
- 9 Amberg State Archives (StA Am), Handelsregister Weiden, Gesellschaftsregister [Weiden Commercial Register, Companies Register], Volume I; Entry of 5th November 1879.
- 10 Alois Kupfer was born in Tisahütte, Weseritz / Bezručice District (30 km southeast of Marienbad / Mariánské Lázně). See: Stadt- und Landesarchiv Wien, Handelsgericht Wien, Verlassenschaftsakt A 24/1905 [Vienna City and State Archives, Vienna Commercial Court, Grant of Probate A24/1905], Alois Kupfer, died 7th February 1905; (= Verlassenschaftsakt Alois Kupfer).
- 11 StA Am, Handelsregister Weiden, Registerakten zu Band I, Landgericht Weiden [Weiden Commercial Register, Register files for Volume I, Weiden District Court], No. 7.
- 12 Verlassenschaftsakt Alois Kupfer: The headquarters of the company was probably in Vienna, where the two main depots for Austria were centrally located at Rahlgasse 3 and Krugerstraße 4.
- 13 StA Am, Amtsgericht Amberg, Handelsregister Nr. 1517, Gesellschaftsregister Nr. 12 [Amberg District Court, Commercial Register No. 1517, Company Register No. 12].
- 14 For information and advice on the genealogical data of the Kupfer and Glaser families, the author thanks Messrs. W. Bauer, Bürmoos; Mag. W. - E. Eckstein, Vienna; G. Gaugusch, Vienna; G. Jochem, Nuremberg; Dr. K.G. Kerschbaumer, Salzburg; K. Ochantel, Vohenstrauß; Z. Prochazka, Domažlice, Dr. S. Schott, Weiden, P. S., United Kingdom.
- 15 The archives also mention Tissahütte as the birthplace.
- 16 In previous publications Alois and Eduard Kupfer are described as brothers, which is incorrect, as the author's genealogical research has demonstrated.
- 17 Zdeněk Prochazka, Sklářství v Českém Lese [The Glass Industry in the Bohemian Forest], 3rd ed., 2009, p.57. The factories are listed on a letterhead.
- 18 GH = glass furnaces, SP = grinding and polishing works.
- 19 Galsterloh, Schmidtlerwerk, Hagenmühle, Finkenhammer and Berglerwerk - all located on the Zott – as well as Gröbenstädt on the Pfreimd and Leinschlag and Wirtsschleif on the Tröbesbach, are now part of the Glass Grinders Trail in the Upper Palatinate Forest Nature Park.
- 20 Ignaz Glaser's Firmenbuch, Bürmoos Parish, Salzburg.
- 21 For the history of Frankenreuth and its glass furnace see also: Siegfried Poblitzki, Markt Waidhaus, Geschichte der Grenzlandgemeinde [History of the frontier parish], Waidhaus 1979, pp.227 ff., 500 Jahre Flachglas, 1487 – 1987 – Von der Waldhütte zum Konzern [500 years of flat glass, 1487-1987 - From forest foundry to combine], Gelsenkirchen, 1987, pp.42 ff.
- 22 Paul Winkler, Bayern's Spiegelglas-Industrie in der Jetztzeit und Vergangenheit, Fürth, 1899, p. 30.
- 23 StA Am, Kataster Vohenstrauß, Steuergemeinde Waidhaus [Land Register], No. 534 and 538 and 500 Jahre Flachglas, supra, p.46.
- 24 The property concerned was a glass foundry with associated rights to produce glass, consisting of factory building with two furnaces, chimney, storerooms and peat store, packing room and straw store, workers' housing, courtyard, gardens and meadows on 6440 square metres of land, of which the factory (No. 14) occupied 6070 square metres according to the Vohenstrauß land register. The glass works was a short distance northeast of the manor house.

- 25 Silica sand for the glass smelting process was crushed and processed in the crushing house.
- 26 5,666 fl. of the purchase price was paid in cash, the rest by two instalments of 5,000 fl. each, payable three and six years later respectively, secured by mortgage. See StA Am, Amtsgericht Vohenstrauß, No. 172.
- 27 StA Am, Bezirksamt Vohenstrauß, construction plans of 1863 / 1.
- 28 <http://www.glasschleifererweg.de> and brochure *Glasschleifererweg im Oberpfälzer Wald* [Glass grinders' trail in the Upper Palatinate Forest].
- 29 StA Am, Bezirksamt Vohenstrauß, construction plans of 1882 / 1.
- 30 Julius Fahdt, Deutschlands Glasindustrie, Verzeichnis sämtlicher deutschen Glashütten, 5th ed., Dresden 1886, p. 57.
- 31 StA Am, Bezirksamt Vohenstrauß, construction plans of 1887 / 4
- 32 Josef Kupfer was the son of the above-mentioned Abraham Kupfer and married to a daughter of the Glaser family.
- 33 Siegfried Poblitzki, Markt Waidhaus, Geschichte der Grenzlandgemeinde, Waidhaus 1979, p.232. Josef Kupfer was also manager of Frauenthal until his death.
- 34 Siegfried Poblitzki, op.cit., p.232; on an inspection on 30th October 1900, Max Kupfer was fined 210 Marks for proven negligence towards employees and deficiencies in works equipment.
- 35 Michael Mack sr. is first shown in the workers' list in 1907 when he was 56 years old, as Cashier, then listed as Manager, see StA Am, Bezirksamt Vohenstrauß, Unterstützungsverein für die Arbeiter der Spiegelglasfabrik [Society for the Welfare of Workers of the mirror-glass factory], Nos. 1127 and 1128.
- 36 Siegfried Poblitzki, 850-Jahr-Feier mit Heimatfest der Marktgemeinde Waidhaus [Waidhaus 850th anniversary festival], Waidhaus 1988, p.120.
- 37 Pauline Kupfer, the first daughter, was born in Frankenreuth in 1859.
- 38 The latter moved to Bahnhofstraße 29 1/3 and 28, Weiden, in 1900. As part of the division of the business in 1899, the estate again came to Alois Kupfer.
- 39 Presumably he moved into the manor house which, with around 15 rooms, had enough space for two families.
- 40 Siegfried Poblitzki, op.cit., p.232. Since 1905, the new owner of Frankenreuth was the Bayerische Spiegel- und Spiegelglas-Fabriken AG. The manor house and associated agricultural land was rented out. The tenant Jakob Ringenberg did away with the private synagogue in 1912, i.e. he found a new use for the space.
- 41 In February 1868 the Chairman of the Jewish Community, S.W. Bloch, requested Alois Kupfer to meet his payment obligation to the community in the sum of 6 fl. Letter in the possession of Mr. Erhard Schwarzmeier, Frankenreuth.
- 42 By the end of the 19th century, *Arbeitsordnungen* [Labour Regulations] governed the working conditions, the *Sozialversicherungsgesetze* [Social Security Acts] of 1883, 1884 and 1889 the social protection of workers. A welfare fund was founded In Frankenreuth in 1878 and, on 1st January 1885, a company health insurance fund.
- 43 An example is the reconstruction of the St. John the Baptist Chapel by Eduard Kupfer in 1883; see Siegfried Poblitzki, op.cit., p.187.
- 44 Ignaz Glaser, Firmenbuch, Inventory No. 15, 1st April 1898 to 31st April 1899 [sic]. The author wishes to thank Mr. Wolfgang Bauer of Bürmoos for making available to him a copy of Ignaz Glaser's notebook, the original of which is deposited with the Bürmoos town council.
- 45 Ignaz Glaser lived in Salzburg; the guilder (= fl.) was in parallel circulation with the crown in Austria-Hungary until 1900.
- 46 Estimate from the balance sheets of the estate of Alois Kupfer and the newly founded Tafel-, Salin- und Spiegelglasfabriken AG [Sheet, Saline and Mirror Glass Factories Ltd] and Bayerische Spiegel- und Spiegelglas-Fabriken AG.
- 47 Ignaz Glaser, Firmenbuch, loc.cit.
- 48 Ignaz Glaser, Firmenbuch, loc.cit.
- 49 StA Am, Kataster Vohenstrauß, Steuergemeinde Waidhaus [Land Register], Nos. 534 and 538.

- 50 Max Kupfer and his family did not live in Frankenreuth, but in Trachena, Tepl District, now Tepla, Cheb District, Czech Republic.
- 51 StA Am, Bezirksamt Vohenstrauß, No. 1373.
- 52 Max Kupfer defended 14-16 hour shifts for young people as a specific requirement of glass production and the economic situation of the business.
- 53 Eduard Kupfer had founded the partnership with registered office in Weiden on 29th April 1899 with his sons Heinrich and Otto as equal partners. See Handelsregister Weiden, Registerakten zu Band I, Landgericht Weiden [Commercial Register], No. 425.
- 54 Alois Kupfer died in Vienna on 5th February 1905.
- 55 The properties concerned were houses nos. 1, 3,4, 5, 6, 8, 9, 10, 13, 14 and 15 in Frankenreuth and Nos. 1 and 3 in Grafenau.
- 56 StA Am, Kataster Vohenstrauß, Steuergemeinde Waidhaus [Land Register], Nos. 534 and 538.
- 57 Hugo Bechmann was the son of Louis Bechmann.
- 58 Emanuel Löwy was the son of Karl Löwy, who was married to Franziska Kupfer, a sister of Eduard Kupfer. Karl Löwy had earlier managed the business of E. & A. Kupfer in Fürth.
- 59 Louis and Meier Bechmann were sons of Wolf Bechmann, who had built up the firm of W. Bechmann in Fürth.
- 60 Cf. Handbuch der deutschen Aktiengesellschaften [Handbook of German Companies], Berlin and Leipzig, various years 1900-1944.
- 61 StA Am, Amtsgericht Amberg, Handelsregister [Commercial Register], No. 1522, Gesellschaftsregister [Companies Register] No. 3.
- 62 Hauptstaatsarchiv München, MH, Stilllegungen in der Glasindustrie [Main Archives, Munich, Closures in the Glass Industry], No. 16055.
- 63 Bayerisches Wirtschaftsarchiv München [Bavarian Economic Archives, Munich], Geschäftsberichte der Bayerische Spiegel- und Spiegelglas-Fabriken AG [Annual Reports of the Bavarian Mirror and Mirror-glass Manufacturing Co. Ltd.], 511/71, various years; also Kataster Vohenstrauß, Steuergemeinde Waidhaus [Land Register], No. 570.
- 64 StA Am, Bezirksamt Vohenstrauß, Abbruch / Neubau Glashütte [Vohenstrauß District Council, Glass Foundry Demolition/Reconstruction], No. 1379.
- 65 StA Am, Bezirksamt Vohenstrauß, Building plans 1863/1; this includes plans from 1923!
- 66 Marktarchiv Waidhaus, Stilllegung der Glasfabrik Frankenreuth [Waidhaus Archive, Closure of Frankenreuth Glass Factory], No. 821/2.
- 67 This refers to photographic glass plates. The glass required to manufacture dry plates, on which the light-sensitive coating was applied by sprinkler technology, was originally sourced from abroad, after the First World War it was produced in Germany. They were supplied in 12-packs (weight about 5 kg.).
- 68 His brother Otto Kupfer – evidently the family still had a fair-sized shareholding – was appointed to the board in his stead in 1928. He held this position until 1932.
- 69 StA Am, Kataster Vohenstrauß [Land Register], No. 540.
- 70 Marktarchiv Waidhaus, Stilllegung der Glasfabrik Frankenreuth [Waidhaus Archive, Closure of Frankenreuth Glass Factory], No. 821/2.

[Index*](#)

[Home*](#)