

Abb. 35.

Figure 116. Bead-molding machine (using compressed air) with device for holding the bead molds (F)(Parkert 1925:155, Figure 35).

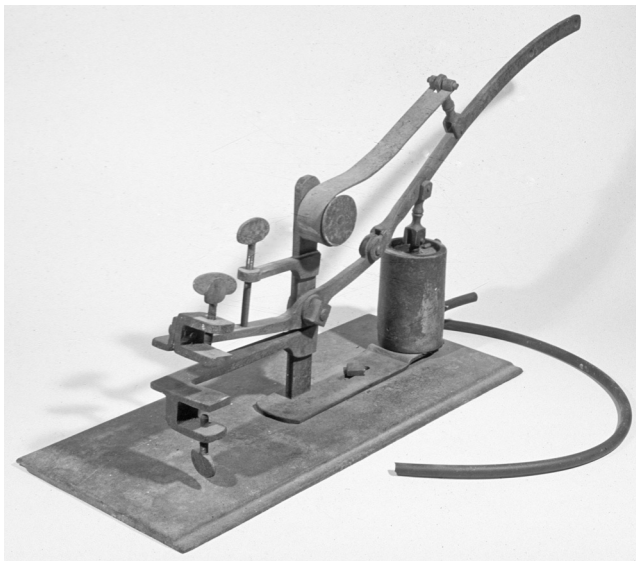


Figure 117. Bead-molding machine (using compressed air), Josefsthäl, around 1900; height: 20 cm (Gablonz Archive and Museum, Kaufbeuren-Neugablonz).

centuries and many companies still produce them. “Solid beads with fish-scale decoration applied on the outside” were shown at the German-Bohemian Exhibition in Reichenberg (Schindler 1906:1721).

There is evidence of a number of companies that specialized in making solid-wax beads around 1930 (Lodgman and Stein 1930):

Andreas Hampel/Gablonz; Belda & Co./Turnau (since 1920, the *Oriente* and *Eterna* wax beads); Finger & Co./Doubrawitz near Königshof (“Wax beads of every kind, buttons, chains and necklaces, one- and two-hole beads, candle drip collars, etc., in all qualities, hollow and solid, and in all colors”);

J. Posselt/Gablonz (“Thuringian wax beads / solid wax beads of all kinds”); Adolf Kopal/Gablonz (“Wax beads, Thuringian beads of all sorts, such as half beads, hollow spheres and buttons, hollow-iris, filled, iris-filled, through-hole knitting beads, spacers, necklaces in chains and pendant, also solid waxed; always something new and all kinds of colors...”); Hugo Tischer/Gablonz (“Production of all kinds of glass beads, especially real gold beads and fine silver beads in shiny, matte, and all colors; rocailles and bugles”); Gustav Weisskopf/Gablonz (“Special production of strung wax beads in all sizes”).

SAMPLE CARDS OF THE REDLHAMMER AND MAHLA COMPANIES

In 1913, the Technical Museum for Art and Industry in Vienna received a “collection of samples of porcelain beads and buttons” as a gift from the Redlhammer Brothers Company in Gablonz (Plates 19C-D, 25A-43A). The sample cards from the Mahla Brothers probably came at the same time (Plates 43B-50). Both companies were strongly export oriented. While Redlhammer also made its “porcelain beads” itself, Mahla was concerned with the export business that was essential to the existence of the entire Gablonz industry.

... the exporter – that’s what the current terminology calls the glass dealer – takes the new samples given him by the people hoping to work for him (“Gurtler,” glass molders, glass spinners, etc.) or he has such samples taken up through his own people, specifically the so-called sample makers, and sees to it that they reach customers, chiefly foreign trading companies, either directly or through traveling salesmen, as a help in making a choice and ordering. Also sometimes such customers even send in a sample of foreign origin, whereupon the exporter has the desired amount made.

As a rule, the sample, for which orders are placed, requires the work of several groups of workers.... Between him and the different producers is the supplier. With him, the exporter settles on the price of the wares to be delivered, based on specific samples and the time of the handover (delivery) of such wares; the remaining “how” and “what” in regards to production do not concern him. The supplier either limits himself to actual delivery without personally having a part in the production, or he owns a workshop, a cutting or molding works,

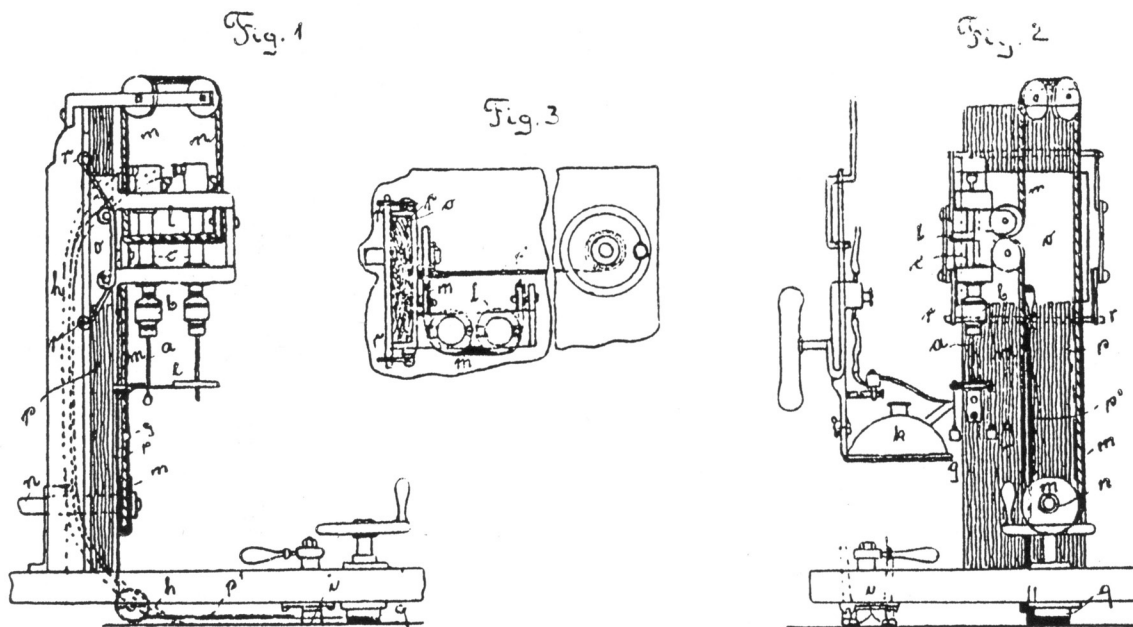


Figure 118. Machine for making hollow-glass beads (Jossand method) (Parkert 1925:156, Figure 36).

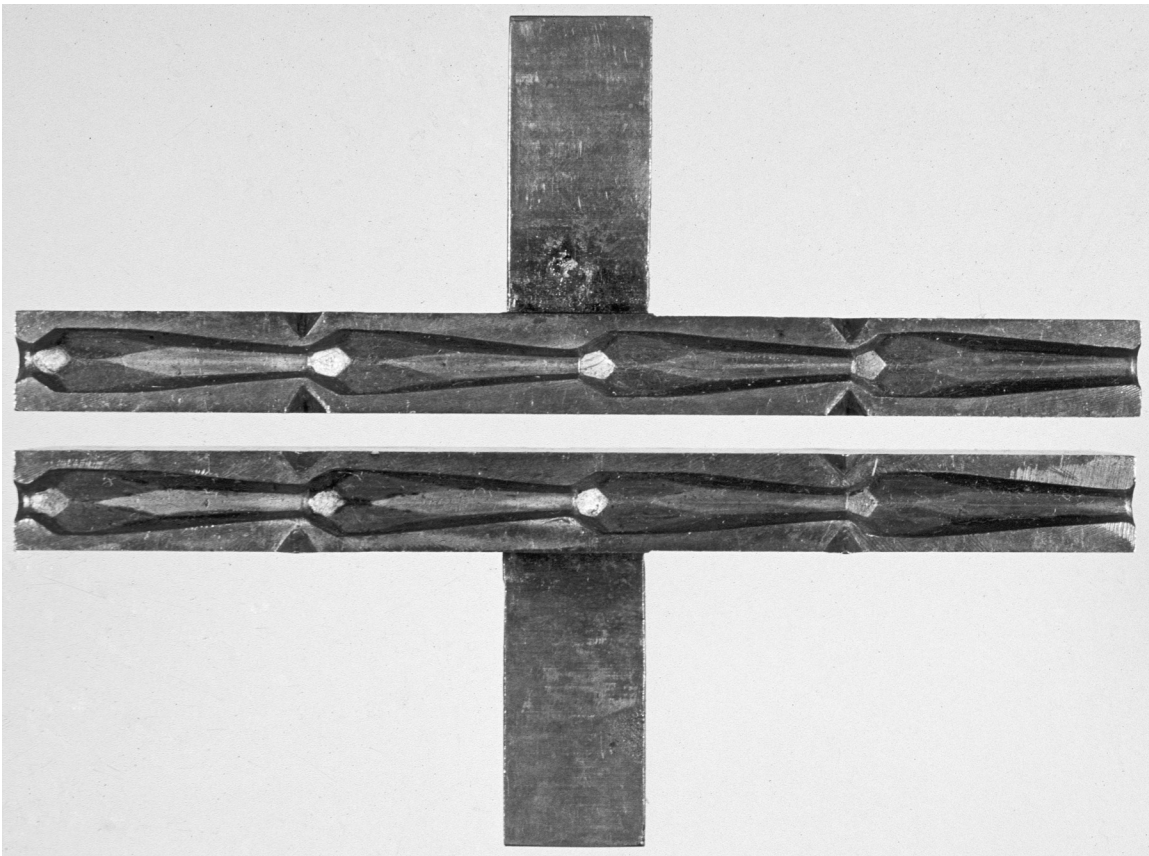


Figure 119. Two-piece mold for eardrops; length: 11.5 cm (Gablonz Archive and Museum, Kaufbeuren-Neugablonz).

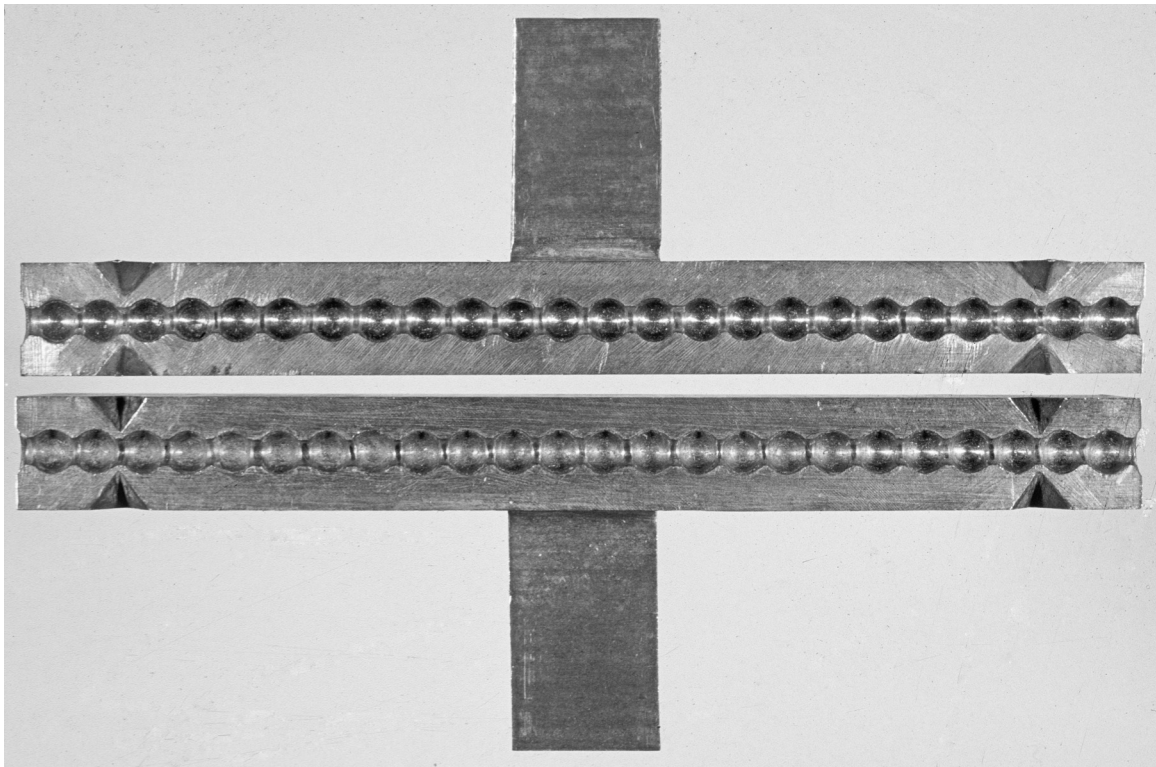


Figure 120. Two-piece mold for beads; length: 13 cm (Gablonz Archive and Museum, Kaufbeuren-Neugablonz).

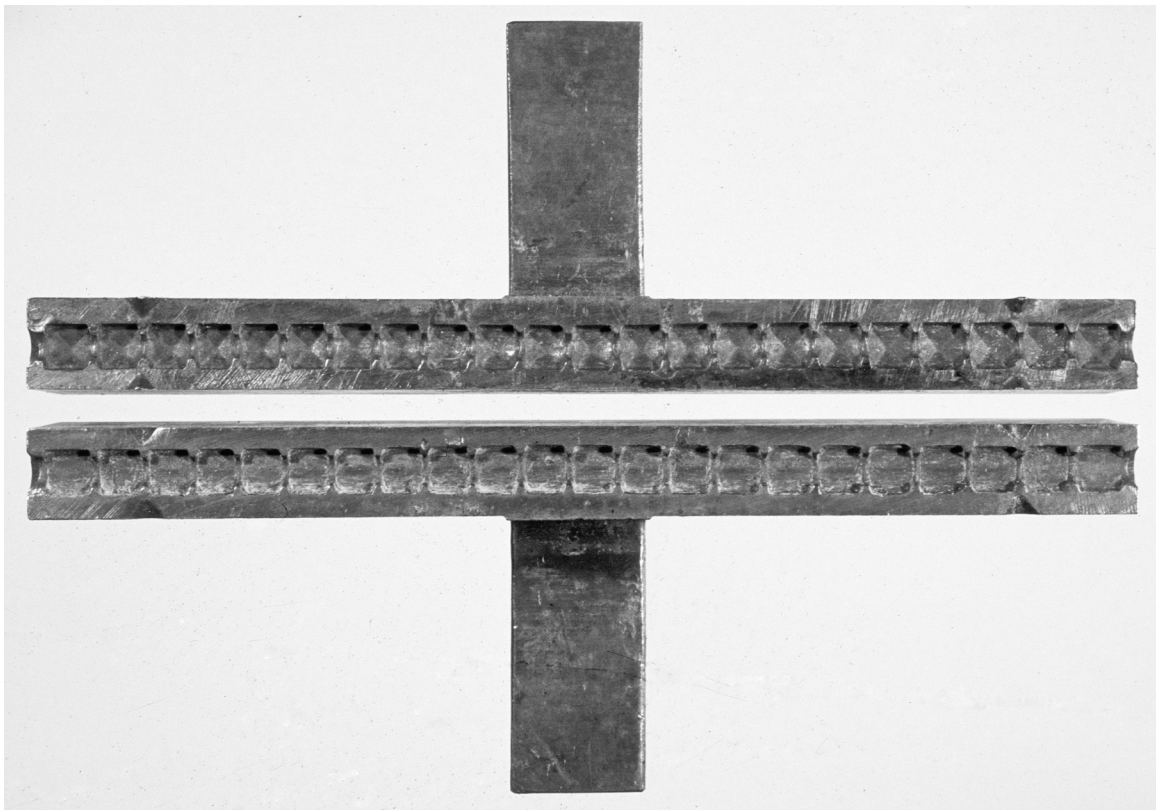


Figure 121. Two-piece mold for beads; length: 11.6 cm (Gablonz Archive and Museum, Kaufbeuren-Neugablonz).

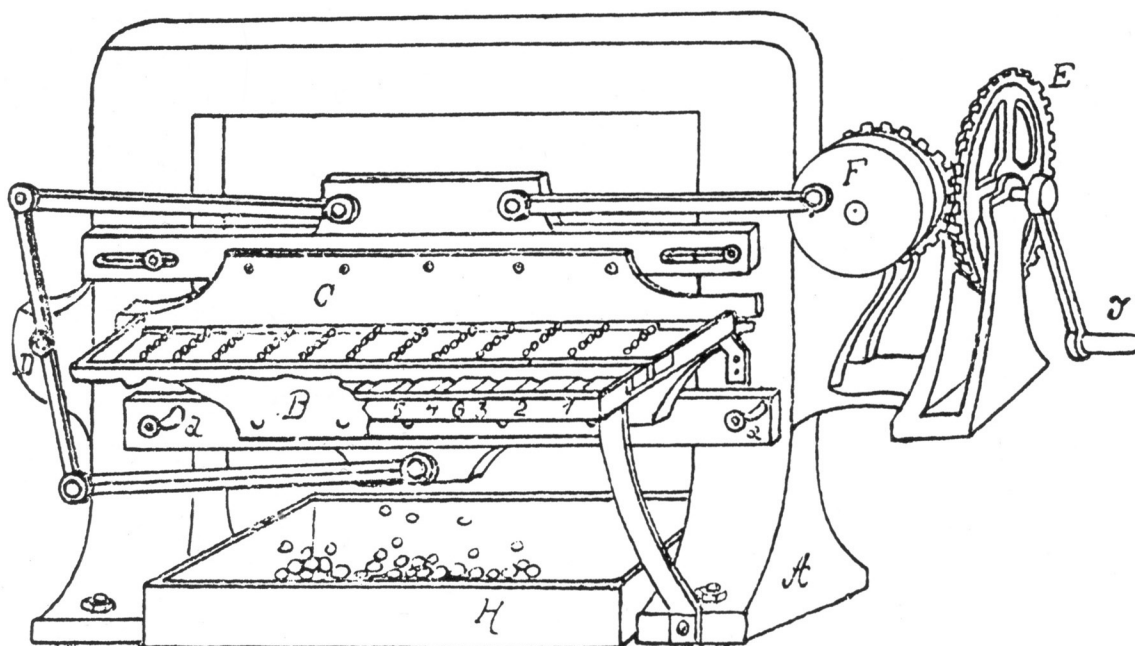


Figure 122. Device for segmenting beads (Parkert 1925:159, Figure 38).

or a *Gürtler* workshop or something similar. In the former case, he is strictly a middleman who supplies the raw glass, which is made in the glasshouse or bought from a merchant, to the molder and then the cutter for further processing, negotiating the wages with each one and finally delivers the finished wares to the purchaser at the prices agreed upon with him beforehand... (Bráf 1882, according to Lilie 1895:198).

The wares produced by the glass and metal smallwares industry are not placed on the market by the producers themselves, but by the export trade.... It can even be said that without the export trade, the so very important economic upswing would never have come about. At present there are some 150 export companies in the district. The largest of these are considered to be: in the crystal branch, the company of Eduard Dressler; in the buttons branch, the Mahla Brothers Company; in bijouterie wares, that of W. Klaar; in the beads branch, the company of J.H. Jeiteles Sohn....

The sample-makers division does not by any means make all the necessary samples itself..., but it procures them for the purpose of placing them on the sample cards (collections) it creates, but the sample specialists do in exceptional cases also work out independent designs and make new samples. Working out the prices, the tasteful arrangements on

the sample cards, fastening, etc., require additional labor... (Lilie 1895:197, 198).

Around the turn of the 20th century, the Mahla Brothers Company (founded in 1878) owned an export house in Gablonz a.d. Neisse, a "Factory of Glass and Metal Buttons, Crystal Wares, and Glass Smallwares" in Morchenstern, a cardboard factory in Pasek, and branches in Berlin, Paris, and London, and representatives in Vienna, Frankfurt, and Hamburg. Around 1900, 300 workers and 120 employees worked for them (Adressbuch 1900:117); around 1910, there were some 500 workers (Hanel 1910, 1:194).

Although not all of the original cards are preserved, the Mahla sample cards provide a good overall view of Gablonz beads: little bugles and drawn beads (Plates 43B-C) made of crystal glass (which can be lined with color) and colored glass; solid beads in round and oval shapes, smooth or faceted or ornamented, most of them probably pressed beads (Plates 44A-46B); Atlas beads in different colors (Plates 46C-47A); hollow beads with color and silver linings (Plates 47B-48A, 50); fine gold beads (topaz glass with silver linings) (Plates 47B, 48B); and the beautiful real-gold beads (crystal glass with a gold lining) with melted ("heated") openings (Plates 48B-49C). The measurements are given in numbers, lines, or millimeters. The size of the 0-bead sometimes corresponds to the norm (2 lines = ca. 4.5 mm), but sometimes also deviates from it. The measurements in millimeters are only approximate values (the beads are usually smaller).

We have Walter Redlhammer to thank for an extensive Redlhammer Company chronicle from the year 1952. Zenkner also treats the history of the company, whose owners were dispossessed in 1945 (Zenkner 1984:48-68). Eduard Moritz Redlhammer (1829-1918) leased space in Gablonz in 1882 for an export company that dealt with the sale of all Gablonz articles, including “brooches, hairpins, Christmas tree ornaments, glass and metal buttons, all kinds of glass beads, perles lustrés (Oriental beads), crystal wares, chandelier pendants, and stones for imitation jewelry (*Simili*)” (Redlhammer 1952:11). In 1885, Redlhammer also leased a little glasshouse in Maffersdorf. Later the company was transferred to his sons (the Redlhammer Brothers).

Walter Redlhammer describes the first attempts with Oriental beads as follows:

In the export business, customers often asked for the so-called Oriental beads. These beads were made by F. Bapterosses and Cie. in Paris and by Risler & Co. in Freiburg.... By chance there was a man named Möldner who claimed to know how to make these beads. The technical procedure was such that a soft paste made up of certain ingredients was put into wooden molds, dried, and fired in a kiln heated with generator gas. The beads made this way were not completely identical in shape, not very transparent, but sold well and at a good price because of the economic boom. It soon turned out that the beads made this way actually required a different process.... Eduard and Albert R. [Redlhammer]... therefore, in the spring of 1890, decided to take chemistry lessons from a professor by the name of Kaempf at the Imperial State Trade School.... The continuation of chemical experiments in the factory that had meanwhile been finished in Gablonz became more systematic.... The new chemical and technological basis that was established after a great deal of careful work had to change the previous methods of production completely. The chemical structure of the basic pastes for making Oriental beads had been discovered. The furnace already in operation was used for the test batches.... In the... factory’s metal works in Görsdorf, the first regular implement aggregate (machines for the hand presses) for pressing the beads was made in the years between 1889 and 1890 under Zähringer’s supervision... (Redlhammer 1952:12-14).

In 1893, the “bead-lustering works equipped by Julius Bendel” went into operation and the pressing works got additional hand pressing machines (Redlhammer 1952:23). At the Paris World’s Fair (gold medal awarded to the export division), Eduard Moritz Redlhammer acquired a bead-

stringing machine which was rebuilt, improved, and copied in Gablonz. The production line was offered in several languages in an advertisement around 1900: “Agate-Buttons / of different kinds and colors. / Imitation Ivory / and Imitation Pearl / China Shirt-cuff-Buttons. / China Beads of all colors / Agate-Finger-rings” (Adressbuch 1900: advertisement section).

In 1902, the pressing works had 24 hand pressing machines and a fly press for buttons (Redlhammer 1952:32, 34). In 1906, a new factory was built at a larger site on Hüttenstrasse in Gablonz. At the German-Bohemian Exhibition in Reichenberg (Arnold 1909:125, 126) the company was represented by a wealth of objects:

The porcelain bead and button factory of the Redlhammer Brothers Company in Gablonz is exhibiting oriental beads, agate buttons, and other articles for export. The brilliantly colored display shows us beads and buttons of different shapes and colors attractively arranged in long strands, and scattered in between them, colored glass rings and medallions. The sphere at the peak of the pyramid-shaped construction is decorated with articles made by the company. The bottom of the cabinet contains boxes with glass buttons and appliqué items and the vertical sides of the substructure of the pyramid are arranged very tastefully with different kinds of glass buttons. The company is showing a completely new line of products being introduced into Austria. Despite being mass produced, the products come in excellent shapes and the colors are just as varied as they are rich. The company has existed since 1882. The beads, made mostly for export, are used for bracelets, necklaces, and other jewelry items, and they are also used in barter trade as money, while the buttons go to European countries for the most part as a mass article. The products enjoy an excellent reputation everywhere for their quality and beauty.

A remarkable body of 400 workers and about 1,500 cottage workers is mentioned in 1907 (Adressbuch 1907:306). At the invitation of Bapterosses & Cie. in Paris, the companies Risler & Co. in Freiburg, Ferd. Schmetz in Aachen, Fratelli Simonis, Candiolo in Turin, and the Redlhammer Brothers in Gablonz negotiated over a price agreement. This resulted in the establishment of a syndicate and the fixing of production quotas, with Redlhammer in third place (Redlhammer 1952:45).

In the matter of patents and trademarks, the company also sought to protect its rights: from 1889 to 1908, several trademarks were registered for Redlhammer. In 1908, we find the “Panther Head” mark (for “pearl-like articles,

porcelain buttons, and porcelain beads”) for the first time. It is familiar to us from a number of sample cards (Plates 25A-B, 26B-C, 32C) (Zentralmarkenanzeiger 1908:211). In the same year (1908), an important contemporary source reports on the Redlhammer Brothers’ Porcelain Bead and Button Factory, Gablonz:

A very singular industry which was not represented in Austria at all only a short time ago and is still only represented by one large enterprise is the manufacture of porcelain beads and buttons. These articles are generally known in the trade under the name, “Oriental Beads” and “Agate Buttons:” they are ceramic products which are fired at a very high temperature and which require an extraordinarily high degree of specialized knowledge and very complicated machinery and equipment for their production.

The Redlhammer Brothers Company in Gablonz, which has taken up this industry rationally for the first time, is far older than their current manufacturing processes. It was founded already in the year 1854, by the Imperial Councilor Eduard Redlhammer and his brother Albert and originally operated a woven-goods factory in Rochlitz near Reichenberg. It was not until later that it changed over to the production and export of glasswares, porcelain beads and buttons. Since this industry, as we know, has always been at home in the Gablonz area, it was logical for the company to move to Gablonz so that its new line of production could develop properly. In 1896, the company built its own factory here. It has had to be expanded a number of times since then. The owners of the company succeeded in overcoming the unusual technical difficulties they encountered in developing a usable product. A continuous improvement of the machinery assisting production made it possible to perfect the quality of the product even more. At the same time new business connections were made, trips were taken to foreign countries, and representatives were situated in all the important export locations on the continent.

The owners always kept an eye on the task of expanding the local industry as a whole. They did not stop at establishing this new branch of manufacture that was still in the development stage, but endeavored to bring it to the highest degree of perfection. They have achieved this goal since the porcelain beads and buttons they make are exported all over the world and are able to maintain their importance on the world market to an increasing extent,

regardless of the very lively foreign competition.... In 1905, an important site was purchased in Gablonz and a big new factory built on it... thus, in the year 1908 alone, an important expansion of the factory took place.... The equipment for the works includes a large number of special machines and devices constructed by the company itself. Some of them are not used anywhere else in the country and are made in the company’s own machine shop. A 150 h.p. steam engine with modern precision controls takes care of the mechanical drive for the manufacturing machinery. In addition, there is a lighting and power plant for operating various motors and the machine workshop... (Mahla 1908:381).

The Redlhammer Brothers’ sample cards in the Technical Museum (complemented by a few cards from the Gablonz Archive and Museum in Kaufbeuren-Neugablonz) comprise the most complete collection of its kind, even though they apparently consist of examples from different series. All of them, however, have the same pressing technique in common. The cards display the popular and famous *Perles Orientales* (Plates 27A-B), as well as the short cylindrical beads in different variations (Plates 28C-29C): the so-called cylinder beads (*Walzenperlen*) (Redlhammer 1952:74), which were also called tube beads (*Röhrenperlen*) and once, strangely enough, even *Rocailles* (Plate 28C); round and oval beads, discs, rings and stars; façon beads of various types, and finally, the “tooth-like interlocking” beads patented in 1896 which create smooth chains (Figure 123; Plates 36A-C).

The sizes of these pressed beads can rarely be classified according to prescribed norms, especially when they take on unusual elongated shapes or only form a whole in three-part motifs consisting of demi-olives and discs (Plates 38A-B, 39B-C).

ACKNOWLEDGEMENTS

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