

Joanna Małocha

*Uniwersytet Papieski Jana Pawła II w Krakowie*

## **A technical and iconographic analysis of medieval tiles from Lipowiec castle**

Lipowiec castle is situated on a limestone hill in the western part of the Tenczyn Ridge, in the centre of a triangle formed by the villages of Wygiełzów, Babice and Płaza. At present, from the administrative point of view, the ruins belong to the village of Babice (Babice commune, Chrzanów powiat, Małopolskie voivodeship).<sup>1</sup> However, in the period of fragmentation, this area was a borderland between the Krakow district and the Duchy of Opole and Racibórz, and at the foot of the castle hill there was an important trade route leading from the capital of the country to Silesia.<sup>2</sup>

Starting at the turn 14th century, the site played a major role in the history of Lesser Poland and the Church in Krakow. Today, as a permanent ruin, it is one of the most important tourist attractions of the region. It also deserves attention due to the fact that it is located at the very beginning of a series of private fortresses established in late Middle Ages in the Republic

1. The name of this village was first recorded in 1238 as *Babici*. At the beginning of the construction of Lipowiec, i.e. at the turn of the 14th century, the Babice parish occupied 83 km<sup>2</sup>, had a population 330 and paid Peter's Pence of 5 szkojec (at that time a currency used in Poland) per year. Cf. T. Ładogórski, *Studia nad zaludnieniem Polski XIV wieku*, Wrocław 1958, p. 203; K. Rymut, *Nazwy miejscowe północnej części dawnego województwa krakowskiego*, Wisła 1968, p. 12.
2. This is a classic example of the location of a medieval castle, dictated by military- and transport-related needs aimed at securing the territory strategically. Cf. A. Gaczol, *Zamek Lipowiec*, "Spotkania z Zabytkami" 6 (1986), p. 36; J. Kamińska, *Obronność siedzib rycerskich w świetle archeologii*, in: *Początki zamków w Polsce*, "Prace Naukowe Instytutu Historii Architektury, Sztuki i Techniki Politechniki Wrocławskiej" 12 (1978), p. 24; T. Małkowska-Holcerowa, *Lipowiec. Dawny zamek biskupów krakowskich*, Warszawa 1989, p. 6.

of Poland. Lipowiec is one of the first examples of the Polish bishops overriding the duke's exclusive right to build and maintain castles.<sup>3</sup>

Interestingly, professional historical, architectural, and archaeological studies of this object were carried out as late as in the second half of the 20th century. To make matters worse, the historical material collected as a result of the excavation programme has not been fully analysed to this day. This article is an attempt to fill — at least to a small extent — the gap by providing a technical and iconographic analysis of medieval stove tiles, an interesting group of movable heritage items from Lipowiec castle. Special attention was given to panel tiles, whose faces were embellished with unique decorative motives with interesting connotations and play a significant symbolic role.

In the first place, however, the rich history of the castle from the 13th to the 15th century will be briefly presented, followed by a history of research on the Lipowiec site, with particular emphasis on archaeological/architectural/conservation works in the years 1967–1974, which led to the acquisition of historical material being the focus of this study. Finally,

3. Cf. S. Kołodziejski, *Geneza obronnych rezydencji możnowładztwa w Polsce Piastowskiej*, in: *Castrum, urbis et bellum*, ed. G. Semânčuk, A. Mâcel'ski, Baranavičy 2002, pp. 233–234; S. Kołodziejski, *Średniowieczne rezydencje obronne możnowładztwa na terenie województwa krakowskiego*, Kraków 1994, pp. 58–60; K. Modzelewski, *Między prawem książęcym a władztwem gruntowym*, t. 2: *Instytucje kasztelanii majątkowych Kościoła w Polsce XII–XIII w.*, "Przegląd Historyczny" 71 (1980), nr 2, pp. 449–480; K. Modzelewski, *Organizacja gospodarcza państwa piastowskiego (X–XIII wiek)*, Wrocław–Warszawa–Kraków–Gdańsk 1975, p. 68. Other examples of this phenomenon include the Lesser Poland strongholds from Ślawków and Iłża, or castles in Jelcz, Milicz and Grodków located in the topographical and cultural centres of Silesia. In more distant Kuyavia we may find an example of the castle in Raciążek. Cf. M. Chorowska, *Rezydencje średniowieczne na Śląsku. Zamki, pałace, wieże mieszkalne*, Wrocław 2003, pp. 67–79; B. Guérquin, *Zamki śląskie*, Warszawa 1957, pp. 59–60; L. Kajzer, *Z badań nad chronologią i rozplanowaniem zamku w Raciążku*, "Ziemia Kujawska" 7 (1985), pp. 59–70; L. Kajzer, *Zamek w Raciążku na Kujawach w świetle nowszych badań*, "Zapiski Kujawsko-Dobrzyńskie" seria C (1980), pp. 9–24; C. Lasota, J. Rozpędowski, *Wczesnogotycki dwór książęcy w Jelczu koło Oławy*, "Prace Naukowe Instytutu Historii Architektury, Sztuki i Techniki Politechniki Wrocławskiej" 15 (1981); O. Lipińska, *Z badań nad wczesnośredniowiecznym osadnictwem północnej części Przedgórzia Iłżeckiego*, in: *Materiały z sesji naukowej „Pradzieje w wczesne średniowiecze w dorzeczu Kamiennej” 19–20/10/1986*, Ostrowiec Świętokrzyski 1989, pp. 66–82; M. R. Pauk, *Funkcjonowanie regale fortyfikacyjnego w Europie Środkowej w średniowieczu*, "Kwartalnik Historii Kultury Materialnej" 51 (2003), p. 4; J. Pierzak, *Średniowieczny Ślawków odsłania swoje tajemnice*, Katowice 1988; *Zabytki Sztuki w Polsce. Śląsk*, red. S. Brzezicki, Ch. Nielsen, Warszawa 2006, pp. 351, 567–568.

a formal analysis of the medieval Lipowiec tiles will be carried out, followed by a presentation of evidence used in establishing the chronology of the items.

In accordance with the requirements applicable to archaeological studies, tables, figures and a catalogue of the analysed items, divided into panel tiles (group I), and pot and bowl tiles (group II), also form an integral part of the article. Given the bulk nature of the material and the high degree of repeatability of its diagnostic features, the catalogue has a tabular form. Such a formalized record gives a comprehensive, consistent and objectified image of a given collection of finds, and also enables easy distinction and comparison of the most salient features of the heritage objects.<sup>4</sup>

### 1. The medieval history of Lipowiec castle

The exact period in which Lipowiec castle was erected is unknown. According to the *Liber Beneficiorum*, before mid-13th century, the area presently covered with ruins was awarded to Lesser Poland knightly House of Gryfici by Duke Casimir I of Opole.<sup>5</sup> However, already in 1238, Klemens Gryf from Ruszcza donated the village of Lipowiec (or Lipowa) along with the following settlements: Babice, Ciężkowice, Długoszowice, Jankowice, Jaworzno, Luszowice, Rozkochów and Zagórze to a Benedictine Sister's monastery in Staniątka near Krakow as the dowry of his daughter Wisenna.<sup>6</sup>

4. The analysed historical material was sorted by inventory numbers. For items from the years 1967–1970, inventory numbers were taken from original inventories, and in the case of material from other three years of studies they were reassigned, based on partially preserved labels, and, as such, they are provided within square brackets. Such a system was adopted due to significant gaps in research documentation, which seriously hindered arranging the material according to a different criterion (e.g. exact place or time of extraction). In addition, the lack of original inventory of items for all excavation seasons makes it impossible to label the finds referred to in the analytical part of the present article by means of primary inventory numbers. Therefore, when referring to an item, the group number and the ordinal number within the group in which the find was recorded (e.g. I.3) are provided using the archival listing method. Relevant captions below each table provide explanations of each symbol used in the description of the finds.
5. Cf. J. Motyka, *Kasztelania Chrzanowska*, in: *Chrzanów. Studia z dziejów miasta i regionu do roku 1939*, Chrzanów 1998, p. 49.
6. Cf. M. L. Wójcik, *Ród Gryfitów do końca XIII wieku. Pochodzenie – genealogia – rozsiedlenie*, Wrocław 1993, p. 49. Presumably, the village itself originally had the name Lipowa and changed it only after Bishop Prandota erected a castle called Lipowiec on a local hill. The origin of both terms may be traced back to the physiography of the area, or more precisely in the common occurrence of linden trees. Cf. *Codex Diplomaticus Poloniae*, vol. 3, Warszawa 1858, pp. 33–36, 38–40, 42–45;

Johannes Longinus also noted that soon afterwards on Lipowiec hill some robbers built a small stronghold from which they attacked the surrounding areas. In 1242 or 1243, this stronghold was captured by Polish knights, and in order to avoid a similar threat in the future, Prince Bolesław the Chaste handed it over – together with several neighbouring villages – to the care of Krakow bishops.<sup>7</sup>

The then bishop Jan Prandota (1200–1266) ordered a new castle to be built on the site of the former den of robbers. He also made a lot of donations to the monastery of Staniątki as a compensation for the acquired property, and organized the land he received in the form of demesne. From that point, Lipowiec became an example of a unique group of medieval strongholds which included episcopal castles, determining not so much the directions of military needs of the monarchy as the largest estates belonging to the Church.<sup>8</sup>

During the pontificate of Bishop Jan Muskata (1295–1320) Lipowiec castle was an important point of resistance of the pro-Bohemian faction, which opposed to the coronation of Władysław I the Elbow-high as king of Poland. The castle, staffed by the forces of Gerlach von Kulpen, brother-in-law of Krakow hierarch, was at that time the centre from which many military operations were led in support of Wenceslaus II and Wenceslaus III.<sup>9</sup> In 1309, the duke imprisoned the bishop and forced him to take an oath

S. Arnold, *Geografia historyczna Polski*, Warszawa 1951, p. 49; S. Ingot, *Stan i rozmieszczenie uposażenia biskupstwa krakowskiego w połowie XV wieku. Próba odtworzenia zaginionej części „Liber Beneficiorum” Długosza*, t. 1, Lwów 1925, p. 59.

7. For such a turn of events it is probably significant that in the era of internal struggles the Bishop of Krakow Jan Prandota belonged to the loyal followers of duke Bolesław the Chaste and his wife. Cf. L. Kajzer, S. Kołodziejski, J. Salm, *Leksykon zamków w Polsce*, Warszawa 2001, p. 78; K. R. Prokop, *Poczet biskupów krakowskich*, Kraków 1999, p. 62.
8. Cf. J. Długosz, *Liber Beneficiorum Dioecesis Cracoviensis*, vol. 2: *Ecclesiae parochiales*, Cracoviae 1864, pp. 226–227. Cf. H. Dobrowolski, *Staropolskie czasy*, in: *Ziemia Chrzanowska i Jaworzno. Monografia*, red. B. Ferenc, Kraków 1969, p. 140; L. Kajzer, *Zamki i społeczeństwo. Przemiany architektury i budownictwa obronnego w Polsce w X–XVIII wieku*, Łódź 1993, p. 145; S. Kołodziejski, *Uwagi o średniowiecznym budownictwie obronnym biskupów krakowskich*, “Teki Krakowskie” 3 (1996), pp. 135–149.
9. Cf. M. Antoniewicz, *Zamki na Wyżynie Krakowsko-Częstochowskiej. Geneza – Funkcje – Konteksty*, Kielce 1998, p. 47; AS/AW [A. Siemaszko, A. Włodarek], *Babice*, in: *Architektura gotycka w Polsce*, t. 2, *Katalog zabytków*, red. T. Mroczko, M. Arszczyński, Warszawa 1995, p. 21; T. Małkowska-Holcerowa, *Lipowiec...*, op. cit., p. 6.

of loyalty and promise to remove von Kulpen's forces from Lipowiec, which then was to be handed over into the hands of the Krakow chapter. In fact, the dispute over Lipowiec stronghold lasted three more years, and the conflict between Muskata and duke Władysław ended only after the coronation of the latter, which happened shortly before the bishop's death.<sup>10</sup>

The oldest brick parts of the castle are associated only with the times of bishop Jan Muskata. The following structures come from this initial chapter in the history of the stronghold: bottom sections of a round (then standalone) stone tower; a corner of an unidentified building (currently located in the south-western part of the site); a well carved out in solid rock (which, as a source of potable water, was an important element of defence of the castle in the event of a long-lasting siege) and fragments of the gatehouse (consisting of a passage and a pedestrian gate). In addition to these masonry structures, the castle must have contained residential and service facilities, most of them probably made of wood and now completely unidentifiable. The entire establishment was surrounded by stone walls, preceded by a deep moat carved in rock, and perhaps a line of additional earthworks. Access to the castle was provided by a wooden bridge over the moat.<sup>11</sup>

In the 15th century Lipowiec underwent several conversions, apparently initiated by Krakow bishops Wojciech Jastrzębiec (1412–1423) and Zbigniew Oleśnicki (1423–1451). The century saw the emergence of parts of the southern, eastern and northern wings of the compound, which somehow absorbed the older structures (i.e. the tower and the well). At the same time, the southern part of the western wing was also erected. Back then, some rooms in upper storeys were already of a higher standard and performed representative functions. They served as accommodation (a bedroom with a corridor and two large apartments), were heated with stoves, topped with vaults and their windows featured stained-glass depictions of episcopal coats of arms.<sup>12</sup> The original chapel was located in the south-east corner;

10. Cf. W. Abraham, *Sprawa Muskaty*, Kraków 1893, p. 51; A. Piskadło, *Grody, zamki, fortece. Budownictwo i architektura obronna do schyłku średniowiecza*, Warszawa 1977, p. 380; T. Silnicki, *Z dziejów Kościoła w Polsce. Studia i szkice historyczne*, Warszawa 1960, p. 281; W. Sobieski, *Dzieje Polski*, t. 1, *Do roku 1696*, Warszawa 1923, p. 31.
11. Cf. B. Guerin, *Zamki w Polsce*, Warszawa 1974, p. 182; L. Kajzer, S. Kołodziejski, J. Salm, *Leksykon...*, op. cit., pp. 78–79; T. Małkowska-Holcerowa, *Lipowiec...*, op. cit., p. 8.
12. Cf. T. Małkowska-Holcerowa, *Lipowiec...*, op. cit., p. 28.

later on, in the 18th century, it was removed, leaving no traces which would be clearly visible today. The whole gatehouse was connected to the main part of the stronghold with a ring of fortifications, which surrounded the castle with a continuous wall. The tower was also adapted to modern combat, i.e. it was elevated and battery emplacements for cannons (tarasnitze) on the upper two floors were created, while on its highest level a defensive terrace with arrowslits was built.<sup>13</sup> At the same time, a settlement with wooden farm buildings and its own walls and a north-facing gate was built in the area located below the upper castle and the gatehouse (from the south-east side). Thus, at the end of the 15th century, the whole compound took a form of a three-part self-sufficient establishment.<sup>14</sup>

A significant portion of the changes described above involved upgrades of the castle's defence system. This fact clearly indicates the military function that Lipowiec continued to perform in the 15th century, most likely related to the intensification of the invasions of Silesian Hussites into the Lesser Poland region. Therefore, the border guard post of Lipowiec was meant to stop, whenever possible, the Hussite forays, inspired mainly by the Zygmunt Korybutowicz, Duke of Gliwice.<sup>15</sup> Undoubtedly, the castle was also a representative seat of Krakow bishops. Preserved documents even contain a record of Zbigniew Oleśnicki's several stays in Lipowiec castle. The whole monumental structure, as seen by people from the Middle Ages, was to constitute a manifest of the Church's power in general, and the successors of St. Stanislaus in particular.<sup>16</sup>

13. Cf. AS/AW [A. Siemaszko, A. Włodarek], *Babice*, op. cit., p. 21; J. Bogdanowski, *Architektura obronna w krajobrazie Polski. Od Biskupina do Westerplatte*, Warszawa 1996, p. 73; B. Guerquin, *Zamki w Polsce...*, p. 182; L. Kajzer, S. Kołodziejski, J. Salm, *Leksykon...*, op. cit., p. 79.
14. Cf. T. Małkowska-Holcerowa, *Lipowiec...*, op. cit., pp. 9–10.
15. Cf. M. Antoniewicz, *Zamki...*, op. cit., p. 156; S. Kołodziejski, *Obronne siedziby biskupów krakowskich. Zarys problematyki badawczej*, in: *Siedziby biskupów krakowskich na terenie dawnego województwa sandomierskiego. Materiały z sesji naukowej. Kielce 20 Sep 1997*, red. L. Kajzer, Kielce 1997, p. 19; F.S. [F. Sikora], *Lipowiec*, in: *Słownik historyczno-geograficzny województwa krakowskiego w średnio-wieczu*, red. A. Gąsiorowski, cz. 3, z. 3, Kraków 2000, p. 674.
16. Cf. G. Dehio, *Geschichte der deutschen Kunst*, vol. 2, Berlin–Leipzig 1921, p. 297; T. Małkowska-Holcerowa, *Lipowiec...*, op. cit., p. 8; O. Zagórowski, *Lipowiec zamek biskupi i dom poprawy dla księży*, "Nasza Przeszłość" 12 (1960), p. 196; M. Zlat, *Zamek średniowieczny jako problem historii sztuki*, in: *Początki zamków w Polsce*, "Prace Naukowe Instytutu Historii Architektury, Sztuki i Techniki Politechniki Wrocławskiej" 12 (1978); p. 101.

Simultaneously, in the 15th century the stronghold began to serve as a prison for people subordinated to the jurisdiction of Krakow bishops. With time, this function of the castle became increasingly important, all the more so since in 1456 king Casimir IV Jagiellon granted the bishops the entire judicial power over the subjects from Lipowiec demesne.<sup>17</sup> In the 16th century, not only clerics guilty of breaking canon law were detained here, but also – and more often – the promoters of the religious reform movement.<sup>18</sup> In light of the above, the need for conversions of the stronghold's interior, i.e. the emergence of a series of prison cells in the northern wing, becomes understandable. The cells were effectively small rooms whose modest furnishings were preserved only in the form of brick latrines and wall niches for shelves. Prisoners received food through slits (the so-called 'sleeves'), carved in the wall just above the ground; such narrow openings are still visible today. The cells were not heated, and the remnants of the only stove in the prison wing are in the corridor.<sup>19</sup>

This prison section of the castle was separated from the east wing by strong doors, both of sides which were covered with sheet metal. The rooms on the first floor, forming the eastern wing, were intended for clergymen who came to Lipowiec voluntarily in order to spend time on retreat. In total, there are five interiors, adjacent to the corridor, on the north end of which,

17. S. Starowolski in his late 16th c. guidebook mentions Lipowiec only in the context of its penitentiary function: and that the supreme bishop of Krakow is the lord of the Duchy of Siewierz, which includes several cities, of which Lipowiec (the closest one to Krakow), where the courts are commonly held, was long ago earmarked as the prison for immoral clergy. Cf. S. Starowolski, *Polska albo opisanie położenia Królestwa Polskiego*, Kraków 1976, p. 76.
18. Cf. A. Gruszecki, *Zamki i pałace małopolskie w XVI w. Cechy reprezentacyjno-mieszkańciewe i obronne*, Warszawa 1986, p. 53; F. Machay, *Działalność duszpasterska kardynała Radziwiłła, biskupa krakowskiego (1591–1600)*, Kraków 1936, p. 25; E. Wiśniowski, *Kościół na ziemiach polskich w średniowieczu*, in: *Historia Kościoła* [original title *Geschichte der Kirche*], t. 2, 600–1500, red. L.J. Rogier, R. Aubert, M.D. Knowles, Warszawa 1988, pp. 454–455; Z. Wojciechowski, *Państwo polskie w wiekach średnich. Dzieje ustroju*, Poznań 1948, pp. 176–178. Undoubtedly, the most famous prisoners of Lipowiec castle of this period include: Maciej of Ropczyce – a follower of Lutheranism (imprisoned in 1526), Franciszek Stankar – a promoter of Zwingli's ideas (imprisoned in 1550) and Jan of Koźmin – a follower of 'religious novelties' of K. Hegendorfer (imprisoned in 1551). Cf. H. Barycz, *Historja Uniwersytetu Jagiellońskiego w epoce humanizmu*, Kraków 1935, pp. 108–110, 252–254, 296–298.
19. Cf. T. Jurasz, *Zamki i ich tajemnice*, Warszawa 1972, p. 64; L. Kajzer, S. Kołodziejski, J. Salm, *Leksykon...*, op. cit., p. 79; T. Małkowska-Holcerowa, *Lipowiec...*, op. cit., p. 27.

as on the ground floor, there is a soil stack. These rooms contain preserved vaults, windows and remnants of furnaces.<sup>20</sup>

In 1629, a significant part of the castle was burnt down in a fire. The site of the fire was reconstructed in the 1740s, by bishop Jakub Zadzik, who, however, took care mostly of the farming part of the establishment. Another misfortune fell on the already declining stronghold in the era of the Swedish Deluge, when the castle served for two years as the headquarters of general Würtz, to be finally burnt down by retreating army of the Scandinavian invader.<sup>21</sup> In 1732, bishop Felicjan Szaniawski decided to restore the ruined castle, intending to use it as a correctional facility and retreat for priests. However, only half a century later, the Austrian authorities confiscated the demesne of the Lipowiec estate and the castle for the benefit of the state treasury. With time, it passed into the hands of private owners, who were interested only in landed estate and did not care for the castle buildings.<sup>22</sup> Finally, the final blow was delivered by a fire in the stronghold, which took place in 1800. From the 1840s, Lipowiec was not inhabited and served only briefly as a defence post of the insurgents during the January Uprising.<sup>23</sup>

## 2. History of archaeological research at Lipowiec castle

Lipowiec became a subject of interest for researchers as early as at the turn of 19th century. It was then that Władysław Łuszczkiewicz performed measurements of the site, while Józef Łepkowski attempted to determine the depth of the castle well by measuring the free-fall time of a lit torch.<sup>24</sup> Then, in late 19th/early 20th century, thanks to Mr. Bernadzikiewicz, a local teacher and enthusiast of archaeology, the castle was visited by: A. Kirkor, G. Ossowski, W. Demetrykiewicz.<sup>25</sup> At that time, the group of restorers

20. Cf. O. Zagórowski, *Lipowiec...*, op. cit., p. 214.

21. Cf. B. Guerquin, *Zamki w Polsce...*, op. cit., p. 182; L. Kajzer, S. Kołodziejki, J. Salm, *Leksykon...*, op. cit., p. 78.

22. Cf. J. Kracik, G. Ryś, *Dziesięć wieków diecezji krakowskiej*, Kraków 1998, pp. 134–135; B. Przybyszewski, *Zarys dziejów diecezji krakowskiej (do roku 1999)*, Kraków 2000, p. 141.

23. Cf. AS/AW [A. Siemaszko, A. Włodarek], *Babice*, op. cit., p. 22; B. Guerquin, *Zamki w Polsce...*, op. cit., p. 182; L. Kajzer, S. Kołodziejki, J. Salm, *Leksykon...*, op. cit., p. 78.

24. Cf. J. Łepkowski, *Przegląd zabytków przeszłości z okolic Krakowa*, Warszawa 1863, p. 25; W. Łuszczkiewicz, *Zamek Lipowiec i jego turma*, Kraków 1884.

25. Cf. M. Cabalska, *Wczesne średniowiecze*, in: *Ziemia Chrzanowska i Jaworzno. Monografia*, ed. B. Ferenc, Kraków 1969, p. 134.



from West Galicia took the initiative of saving the heritage site from total destruction, meeting with opposition of the then owners of Lipowiec, who were reluctant to look at the estimated costs of the entire project. Finally, in the 1930s, Gabriel Leńczyk suggested that the ruins were located on the site of a fortified prehistoric establishment.<sup>26</sup>

After World War II, the castle was entered into the Register of Monuments (1953). At that time, the Voivodeship Conservator of Monuments decided to give it a status of permanent ruins, adapted to visits by tourists. Relevant research and conservation work on the architectural aspect of the site was performed in 1959 and 1961–1968 by the Krakow branch of the Heritage Conservation Laboratory.<sup>27</sup>

A follow-up to these activities was an archaeological excavation campaign, which lasted for several seasons in the years 1967 to 1974. To this day, it constitutes the last stage of research on the history of Lipowiec. Also in this case, the Voivodeship Conservator of Monuments from Krakow (dr Hanna Pieńkowska) was the ordering party, while the work was carried out by specialists employed at the Archaeological and Preservation Workshop of the VCoM, led by mgr Jerzy Kozak. Initially, the Archaeological Museum in Krakow supervised the research, but in 1968 VCoMs took over this role. The works covered the gatehouse area and a small part of the upper castle. In total, 30 excavations were made with a total area exceeding 40 ares, reaching a maximum depth of over 7 m.

The long-term and uninterrupted functioning of the castle fully explains both the huge number and significant diversity in the quality and chronology of the movable material obtained during the excavation campaign. This includes stove tiles, metals (mainly weapons and tools; only

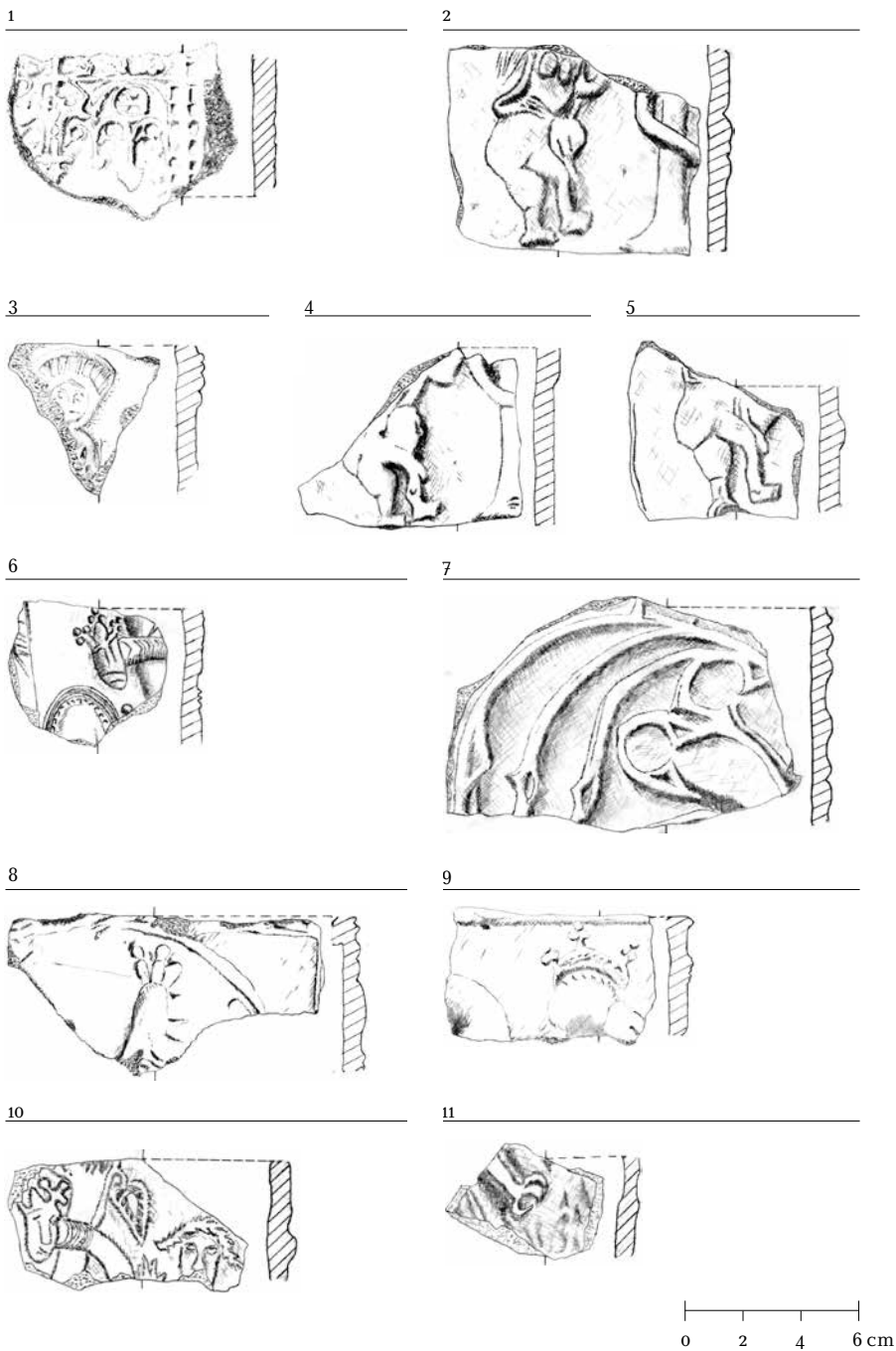
26. Cf. G. Leńczyk, *Drugie sprawozdanie z inwentaryzacji i planowania grodzisk w woj. Krakowskim w r. 1933*, "Sprawozdania z Czynności i Posiedzeń Polskiej Akademii Umiejętności" 34 (1934), pp. 28–33; G. Leńczyk, *Grodziska i zamczyska w województwie krakowskim*, "Z Otchłani Wieków" 9 (1934) pp. 47–50. Cf. S. Kołodziej-ski, *Gabriel Leńczyk – prekursor archeologii średniowiecza i okresu nowożytnego w Polsce*, "Teki Krakowskie" 16 (2009), pp. 76–81. This alleged fortified settlement was identified by J. Bogdanowski as an earthwork from the period of the Swedish Deluge. Cf. J. Bogdanowski, *Sztuka obronna*, Kraków 1993, p. 139.
27. Technical documentation of the studies was drawn up by L. Stachowski, while historical and architectural analysis by O. Zagórowski, J. Frazik and J. Bogdanowski. Cf. AS/AW [A. Siemaszko, A. Włodarek], *Babice*, op. cit., p. 22; B. Guerquin, *Zamki w Polsce...*, op. cit., p. 182; L. Kajzer, S. Kołodziej-ski, J. Salm, *Leksykon...*, op. cit., p. 78; T. Małkowska-Holcerowa, *Lipowiec...*, op. cit., p. 15.

two coins), fragments of ceramics and glassware, a small number of horn products, and finally, a large amount of animal osseous material. These artefacts, however, have not been properly analysed; to make matters worse, half of them are stored in conditions radically deviating from approved standards. While it is true that some of the material from the first four seasons of the research has undergone restoration and is currently stored in the warehouses of Irena and Mieczysław Mazaraki Museum in Chrzanów,<sup>28</sup> approximately 200 boxes are held in castle basement, exposed to the destructive effects of moisture, dust and rodents. Obviously, metal and organic objects kept there are undergoing degradation at an alarming rate. Labels, mostly no longer legible, are decaying, which renders the identification of a specific batch of material impossible, both in terms of time and location of discovery. Problems with assigning historical items to a specific culture layer and research season also affect 'Chrzanów' batch of finds from Lipowiec.

The issue of the documentation of excavations does not look much better. Of the eight research seasons, only three have fairly complete documentation (1967, 1968, 1970), three 'consecutive' years already lack a significant portion of documents (1969, 1971, 1972), and for the 1973 and 1974 seasons only filed inventory of labels is available. Regrettably, the inventories preserved (especially from the first years of research) provide, to put it mildly, imprecise information.<sup>29</sup> The illustrations, on the other hand, are of interest mainly to architects. However, a researcher interested in archaeology has only few and fragmentary profile drawings with conspicuously missing collective excavation plan or summary drawings that would illustrate the stratigraphy of the site.

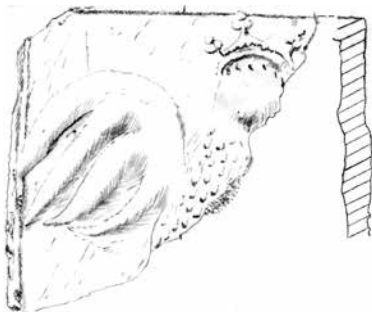
28. Parts of documentation concerning the restoration of selected metal items from Lipowiec, excavated in 1968, have been preserved. Its authors include: mgr L. Luchter, mgr M. Kral-Kruszek and J. Domrazek. Cf. Irena and Mieczysław Mazaraki Museum in Chrzanów [hereinafter: IMMMCh], ref. K/246, *Lipowiec – zamek, woj. krakowskie. Zabytki archeologiczne. Dokumentacja konserwatorska wykonana na zlecenie Pracowni Archeologiczno-Konserwatorskiej PKZ o/Kraków*, Kraków 1973 [a typescript from the archival collections of the Regional Centre for Research and Documentation of Heritage in Krakow, documentation received from VCoM in Krakow].

29. Even the recorded location of the excavation 'to the left of the bridge' sounds dubious and the thickness of the layer (100 to 300 cm deep) is rather peculiar.



Pl. I. Medieval panel tiles from the Lipowiec hill – investigations of J. Kozak  
 (drawn by J. Małocha) (cat. no.: 1 – I.2; 2 – I.36; 3 – I.37; 4 – I.38; 5 – I.39; 6 – I.40;  
 7 – I.42; 8 – I.11; 9 – I.12; 10 – I.56; 11 – I.58)

1



2



3

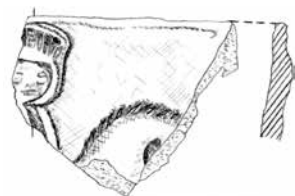


4

0 3 6 9 cm



5



6



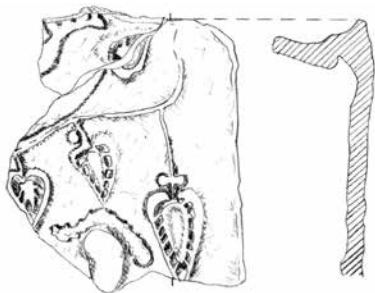
7



0 2 4 6 cm

Pl. II. Medieval panel tiles from the Lipowiec hill – investigations of J. Kozak (drawn by J. Małocha) (cat. no.: 1 – I.13; 2 – I.41; 3 – I.49; 4 – I.50; 5 – I.52; 6 – I.51; 7 – I.53)

1



2



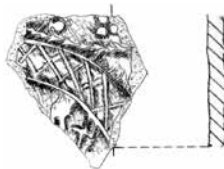
3



4



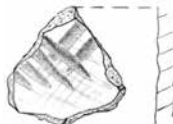
5



6



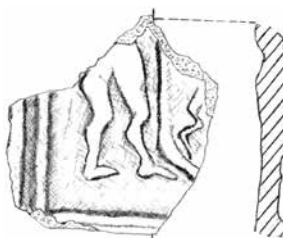
7



8



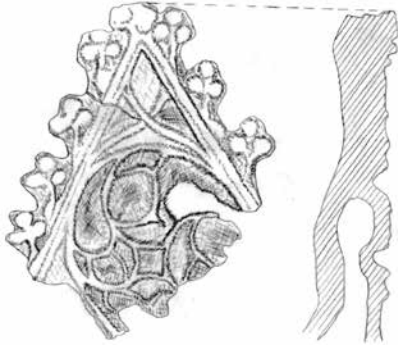
9



0 2 4 6 cm

Pl. III. Medieval panel tiles from the Lipowiec hill – investigations of J. Kozak (drawn by J. Małocha) (cat. no. : 1 – I.54; 2 – I.55; 3 – I.57; 4 – I.59; 5 – I.60; 6 – I.61; 7 – I.105; 8 – I.66; 9 – I.67)

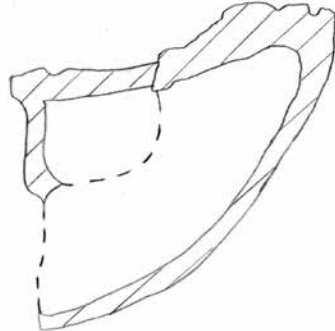
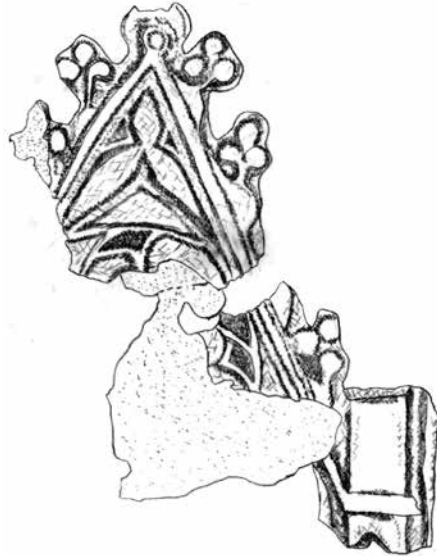
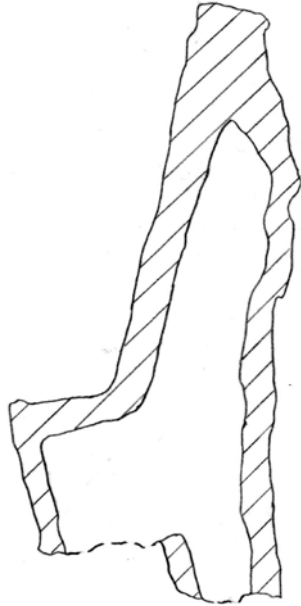
1



2



3



0 2 4 6 cm

Pl. IV. Medieval panel tiles from the Lipowiec hill – investigations of J. Kozak (drawn by J. Małocha) (cat. no.: 1 – I.63; 2 – I.64; 3 – I.62)

### 3. Medieval stove tiles from Lipowiec — a technical analysis

Scant knowledge about the interior furnishings of Lipowiec castle during the Middle Ages is enriched somewhat by the discovered fragments of stove tiles. Altogether, there are 120 items, 105 of which come from panel tiles, the rest are specimens formed on a pottery wheel (including 6 fragments of pot tiles and 9 of bowl tiles).

Most objects were made of common greasy ferruginous clay (type 1). Specimens made of kaolinite clay (type 2), a material of better quality but difficult to obtain, are found rarely. Or, more precisely, the ratio of the number of type 1 tiles to the number of type 2 tiles is 6:1. Therefore, for most of Lipowiec tiles, their composition had to include a thinning additive. Specimens with average amount of a medium-grain additive are found most often, followed by a coarse additive, with a fine-grain additive being the least frequent. Generally speaking, sand was also used as a thinning additive.<sup>30</sup>

As for the further process of forming tiles found in Lipowiec, specimens fired in an oxidizing atmosphere clearly prevail in number (117 out of 120 items). The monochromatic fracture in 73 percent of the items indicates good firing quality, and hence considerable skills of the Lesser Poland stove-makers. However, not all of the Lipowiec tiles were glazed: in the case of die-formed specimens, 35 unglazed items were found, while among pot and bowl tiles only 2 specimens bear traces of a greenish glaze.<sup>31</sup> In the case of glazed items, lead glaze was used almost exclusively, which in combination with a brick-red background of ferruginous clay usually gave a brown or greenish-olive colour. It is also worth noting that some of the specimens contain traces of use in the form of blackened surfaces (cat. no. I.79, I.80, I.81, I.88, II.15).

In the collection of panel tiles from Lipowiec castle there are 35 fragments of middle tiles and 2 cornice tiles, while the condition of all other specimens prevents an accurate indication of their original location on the stove wall. Attempts to determine the shape of the face meet with similar difficulties. Half of the specimens remain unidentified in this respect, while the remaining ones are mainly flat, four-sided (square or rectangular) tiles. Equally little can be said about the chambers of die-formed Lipowiec tiles.

30. Cf. M. Dąbrowska, *Kafle i piece kaflowe w Polsce do końca XVIII wieku*, Wrocław — Warszawa — Kraków — Gdańsk — Łódź 1987, p. 175.

31. Tiles referred to in this article bearing catalogue numbers II.1 and II.2.

On the basis of the few surviving fragments of walls and similar items from Czersk and Poznań, it can be assumed that in most cases they had an open chamber, and its walls as well as the edges of the face were in contact with each other.

As for the features unique to pot and bowl tiles, in the set of these items from Lipowiec castle, specimens made by turning (87%) prevail significantly. Out of 13 objects with an identifiable shape of the hole, 8 have a square hole (cat. no. II.3–5, II.9–12, II.15), and 5 a round hole (cat. no. II.1, II.11, II.13–14). Tile walls in 60 percent of analysed tiles are straight (cat. no. II.1, II.3–4, II.8–13), while in the remaining ones – bevelled (cat. no. II.2, II.5–7, II.14–15). Last but not least, none of the surviving fragments of the files made on the pottery wheel features any ornaments.

The above technical features of the analysed collection of tile fragments enable their dating by means of comparative analysis. This primarily involves finding analogies in the type of clay and the thinning additive used, as well as the chemical properties of the glaze applied. Findings parallel in this respect to panel tiles specimens from Lipowiec include primarily items from the second half of the 15th century discovered in Nowy Wiśnicz, Czersk and Poznań.<sup>32</sup> As for fragments of pot and bowl tiles from Lipowiec castle, technical similarities are visible in 15th-century finds from urban sites (Krakow, Kazimierz, Warsaw, Gdańsk), rural sites (Siedlątków) or castles (Czersk, Stare Drawsko, Kruszwica). Certain similarities can also be pointed in relation to slightly later (early 16th century) pot tiles from Ciechanów, Kościany, Oborniki, Gniezno and Mogilno, as well as bowl tiles from Lviv, Mogilno and Solec nad Wisłą.<sup>33</sup>

Summing up, comparative analysis of technological features allows us to conclude that the preserved fragments of decoration-free Lipowiec tiles are mostly (45%) 15th century items. They rank just before the group of

32. Cf. M. Dąbrowska, *Kafle...*, op. cit., pp. 176, 204; J. Okoński, *Metoda opracowania zbiorów kafli z badań archeologicznych. Przykład zamku w Nowym Wiśniczu, woj. Tarnowskie*, Warszawa 1984, pp. 191–192.

33. Cf. M. Dąbrowska, *Kafle...*, op. cit., p. 84. In the case of indeterminate and heavily damaged fragments of the Lipowiec tiles, determining the chronology should be based to a greater extent on the principles of stratigraphy than analogy. Therefore, one should take into account the location of discovery and the co-occurrence with other, more reliable date reference points. This applies in particular to damaged flanges of pottery and bowl tiles.



slightly older objects (from the turn of 15th century, 40%) and far outnumber the slightly younger items (from the turn of the 16th century, 22%).

#### 4. Medieval stove tiles from Lipowiec – an iconographic analysis

Among surviving fragments of the tile tiles from Lipowiec, 32 percent specimens bear traces of decorations on the face. At the same time, as in the case of most of early tiles, a basic decorative motif was only rarely present, contained within an area surrounded by a graphic border (e.g. cat. no. I.1, I.3, I.7, I.11–14, I.41, I.54, I.64; Fig. I.9, II.2, III.1, IV.2).<sup>34</sup> The arrangements are usually asymmetrical, with relief used as a dominant decorative technique. The images themselves can be classified into several groups depending on their iconographic content.

The first group includes religious motives, prevalent in Gothic paintings and sculptures. They include items with the biblical scene of the temptation of Adam and Eve in the Garden of Eden (e.g. cat. no. I.36, I.38–40, I.54; Fig. I.2, I.4–6, III.1). The first parents are shown on tiles as naked figures, standing on both sides of the tree. A snake with a human head is coiled around the trunk.<sup>35</sup> This category also includes items with images of the so-called 'Christ in the well', presenting the Resurrected Christ, with half of his body hidden inside the rectangular opening of the grave (e.g. cat. no. I.64, I.66; Fig. III.8, IV.2).<sup>36</sup> The group of religious images is also represented by tiles with the motif of St. George as a horseman, slaying a prostrate dragon with his lance (e.g. cat. no. I.49–53; Fig. II.3–7).<sup>37</sup>

The second group, with knightly or courtly motives, is made up of items with images of a knight (or king) on horseback with a lance, engaging

34. Cf. M. Dąbrowska, *Kafle...*, op. cit., p. 125; J. Ochoński, *Z badań nad typologią i zmiennością dekoracji kafli w Polsce*, Warszawa 1988, p. 52.

35. Cf. D. Forstner, *Świat symboliki chrześcijańskiej*, tłum. W. Zakrzewska, P. Pachciarek, R. Turzyński, Warszawa 1990, pp. 152–153, 307; S. Kopaliński, *Słownik symboli*, Warszawa 1990, pp. 73, 450.

36. Cf. Z. Świechowski, *Sztuka gotyku*, Poznań 1950, p. 70.

37. Basic information about the iconography of St. George – cf. e.g.: J. Darnowska-Łukaszewska, M. Jacniacka, *Jerzy z Kapadocji. Ikonografia*, in: *Encyklopedia Katolicka*, t. 7, Lublin 1997, col. 1225–1227; H. Fros, F. Sowa, *Księga imion i świętych*, t. 3, Kraków 1998, col. 284–288; J. Kłosińska, *Ikony*, Kraków 1973, pp. 200–207; V. Schaubert, H.M. Schindler, *Ilustrowany leksykon świętych*, tłum. P. Tkaczyk, R. Zajączkowski, Kielce 2002, pp. 335–338; V. Schaubert, H.M. Schindler, *Święci na każdy dzień. Patroni naszych imion*, tłum. B. Widła, Warszawa 2000, pp. 174–175.

in a fight (e.g. cat. no. I.14–15, I.37, I.41, I.59, I.84; Fig. II.2).<sup>38</sup> The rationale behind separating this group of items could be questioned due to the high degree of similarity of the scene to the above-mentioned representations of Saint George. However, the uniqueness of this motif is supported by the fact that such images, clearly not of a hagiographic nature, are known from locations such as Poznań or Wenecja near Warsaw.

The third group consists of tiles decorated with heraldic representations, and, more specifically, the image of an eagle in the crown (e.g. cat. no. I.12–13, I.57, I.68; Fig. II.1, III.3).<sup>39</sup> Further two groups include specimens decorated with floral and architectural motives. The latter present mainly detailed reproductions of a Gothic wimperg [a Gothic ornamental gable] on two cornice tiles from Lipowiec (cat. no. I.62, I.63; Fig. IV.1, IV.3). The last group contains items on which unidentified imagery, either ornithomorphic (e.g. cat. no. I.11, I.47, I.58; Fig. I.8, I.11) or anthropomorphic (e.g. cat. no. I.59, I.67; Fig. III.4, III.9) is visible.

Embellishments on Lipowiec tiles played a significant role in determining the chronology of this group of items, in that they served as the basis for comparisons with decorated tiles from other sites and examples of works of art whose dating does not raise any doubts. And so, specimens showing temptation in the Garden of Eden are iconographic analogies to late-medieval tiles from Upper Silesia,<sup>40</sup> and Bohemia and Moravia<sup>41</sup>. Moreover, the Lipowiec items with the image of St. George slaying the dragon seem to be a much simplified version of the 14th-century and 15th-century

38. Presumably, in this case the tiles were created in pairs to form a complete scene.
39. The image is one of an eagle, which Krzyżanowski later associated with the coat of arms of the Kraków voivodeship and described as follows: "A white eagle with a crown, head turned left, tongue hung out, wings up, legs spread." S. Krzyżanowski, *Słownik heraldyczny dla pomocy w poszukiwaniach archeologicznych*, Kraków 1870, p. 33.
40. Cf. T. Szydłowska, *Gotyckie i renesansowe kafle w muzeach Górnego Śląska (katalog wystawy)*, Bytom 1973, p. 13.
41. The presentation of Adam and Eve at the Tree of Knowledge – with a design similar to the decoration of the Lipowiec tiles – is known, among others, from other 15th-century items from sites in Brno, Český Krumlov (castle), Český Krumlov (castle), Kroměříž, Mělník, Mohelnice, Plzeň, Prague – Malá Strana, Prague – Nové Město, Rakovník and Rožnow (castle) and on a 16th-century specimen from Olomouc. Cf. Č. Pavlík, M. Vitanovský, *Encyklopedie kachlů v Čechách, na Moravě a ve Slezsku. Ikonografický atlas reliéfů na kachlích gotiky a renesance*, Prague 2004, pp. 29–30, 189–190, 318–319, Fig. 7–19.

finds from Silesia<sup>42</sup>, Wenecja and Raciąż, and slightly younger specimens of castles in Oświęcim and Bodzentyn.<sup>43</sup> It should also be mentioned that there is a clear analogy between items from Lipowiec and a group of 15th-century finds from Bohemian (Hradec Králové, Kutná Hora, Lipnice, Návárov) and Moravian sites (Bouzov, Brno, Starý Jičín).<sup>44</sup> And the presentation of the so-called 'Christ in the well' on Lipowiec tiles, despite unquestionable difficulties in rendering the whole composition in clay and omitting many details, bears similarity to the late-Gothic depictions of *Misericordia Domini* from Iwanowice, Zbylitowska Góra, Pleśna, Biecz and Donaborów.<sup>45</sup> Known examples also include 15th-century tiles from the Bohemian-Moravian area, the decoration of which refers to the theme mentioned above, yet much more elaborate and identified by researchers as the scene of the Resurrection.<sup>46</sup>

Next, specimens depicting a king (knight?) on horseback are similar to the 15th-century items from Nowy Wiśnicz, Wenecja near Žnin and the episcopal castles in Poznań and Raciążek, as well as tiles from Sienno, the castle in Pułtusk and the manor in Biezuń, which date back to the first half of the 16th century.<sup>47</sup>

Also specimens with an image of the heraldic Piast eagle have their analogies in the form of tiles from Wawel (14th c.), Wenecja and Raciążek

42. This concerns tiles from Wrocław (the Dominican Square), castles in Wleń, Racibórz i Namysłów. In the case of Namysłów castle, however, the dragon-slaying St. George is not sitting on a horse but standing on the ground. Cf. C. Buśko, *Nurt dworski w ikonografii kafli śląskich*, in: *Kultura średniowiecznego Śląska i Czech. Zamek*, red. K. Wachowski, Wrocław 1996, p. 51.
43. Cf. M. Dąbrowska, *Kafle...*, op. cit., Fig. 61, 131; L. Kajzer, *Zamek w Raciążku*, Łódź 1990, p. 202, Fig. 73.3; J. Smoleńska, *Śląskie kafle średniowieczne w zbiorach Muzeum Narodowego w Warszawie*, "Rocznik Muzeum Narodowego w Warszawie" 19 (1975), pp. 266, 274; A. Świechowska, *Wykopaliska na zamku w Wenecji pod Żninem*, "Biuletyn Historii Sztuki" 9 (1949), pp. 223–224, Fig. 100–101.
44. Cf. Č. Pavlík, M. Vitanovský, *Encyklopedie...*, op. cit., pp. 50, 214, 342–343, Fig. 270–280.
45. Cf. T. Chrzanowski, M. Kornecki, *Sztuka Ziemi Krakowskiej*, Kraków 1982, p. 151; J. Kęmbłowski, *Polska sztuka gotycka*, Warszawa 1976, Fig. 107.
46. This concerns tiles from Bohemian sites in Helfenburk u Úštěka, Hradec Králové, Křešice, Prague and Sedlčany and Kralice in Moravia. Cf. Č. Pavlík, M. Vitanovský, *Encyklopedie...*, op. cit., pp. 44, 206–207, 335, Fig. 187–192.
47. Cf. M. Dąbrowska, *Kafle...*, op. cit., p. 126, Fig. 3, 42, 107, 117; L. Kajzer, *Zamek w Raciążku*, op. cit., p. 202, Fig. 72; J. Okoński, *Z badań nad...*, op. cit., p. 55, footnote 142; A. Świechowska, *Wykopaliska...*, op. cit., p. 224, Fig. 103. In the case of tiles from Poznań, Raciążek and Sienno, the rider holds the lance in his right hand, with a sword raised above his head.

(both from the 2nd half of the 15th c.), and Oświęcim (the 1st quarter of the 16th c.).<sup>48</sup> This image is also the most common heraldic motives appearing on medieval Silesian tiles, as exemplified by finds from Bestwiny, Opole and Rogów Opolski.<sup>49</sup>

Finally, items from Lipowiec decorated with floral motives resemble small fragments of tiles from Nowy Wiśnicz, Czersk and Raciążek.<sup>50</sup> Stove cornice pieces inspired by Gothic architecture (wimpergs, tracery and rosettes) bear resemblance to finds dated to the turn of the 16th century, and those from the manor in Spytkowice and castles in Odrzykoń, Czersk, Inowłódz, Ciechanów and Nowy Wiśnicz.<sup>51</sup> The items discussed here also feature similarities to certain Bohemian and Moravian finds, especially with regard to wimperg-shaped cornice tiles dating back to around 1500 from the castles in Bouzov, Lipnice, Rožnov and Točnick.<sup>52</sup>

Based on the results of comparative analysis, both in areas of technology and iconography, we may hypothesize that the collection of the tiles from Lipowiec presumably constitutes the remains of stoves built in the times of Zbigniew Oleśnicki in luxury guest rooms which the bishop ordered to furnish on the upper floors of the castle. The above conclusion is supported, apart from the late-Gothic character of embellishments on most tile specimens, by the location of their discovery. The majority of the material comes from the upper castle (the 'well' excavation), the original moat, the depth of which was reduced in the 16th century by activities such as filling with debris from the upper castle (excavation I/67, section B of excavation II/70 and sections A, B and C of excavation VII/78).<sup>53</sup>

## Conclusions

Due to the turbulent history of Lipowiec castle, its historical content, both fixed and movable, survived to the present day in a highly defective and

48. Cf. M. Dąbrowska, *Kaflę...*, op. cit., p. 126, Fig. 62; L. Kajzer, *Zamek w Raciążku*, op. cit., p. 202, Fig. 72; J. Okoński, *Z badań nad...*, op. cit., p. 25.

49. Cf. C. Buško, *Nurt dworski...*, op. cit., p. 52.

50. Cf. M. Dąbrowska, *Kaflę...*, op. cit., p. 126; L. Kajzer, *Zamek w Raciążku*, op. cit., Fig. 74; J. Okoński, *Metoda opracowania zbiorów...*, op. cit., p. 192.

51. Cf. M. Dąbrowska, *Kaflę...*, op. cit., Fig. 21.1, 21.3, 80, 85, 114; J. Okoński, *Metoda opracowania zbiorów...*, op. cit., p. 192.

52. Cf. Č. Pavlík, M. Vitanovský, *Encyklopedie...*, op. cit., pp. 167–168, 298–299, 424–425, Fig. 1145, 1151–1153.

53. Unfortunately, field studies did not provide sufficient data to enable a detailed reconstruction of the medieval heating system in Lipowiec castle or to describe its individual stoves.

incomplete state. Nevertheless, an analysis of medieval finds, especially ceramics and stove tiles, enables to trace significant similarity of Lipowiec materials to items known from the then city of Krakow. Such likeness is best explained by the fact that from the 14th to 16th century the castle, then serving as an episcopal seat, showed a need for specialized craft and luxury items. In a way, a natural solution in this situation was to look for such products in nearby Krakow, a 'home town' of Church hierarchs. Yet, in the case of some of the finds, one can also notice traces of local solutions and traditions or influences from other regions of Poland (especially Silesia). Understandably, considering the location of Lipowiec castle, there are also clear iconographic analogies to items from Bohemia and Moravia. Note, however, that the collection of artefacts discussed above is only a small, extant part of the material culture of medieval inhabitants of the castle. Despite several conclusions presented here, as regards Lipowiec, it transpires that there are still at least as many questions already answered as waiting to be answered.

# CATALOGUE

list of morphological and technological features of the medieval stove tiles from Lipowiec Mound,  
derived from archaeological investigations from 1967-1974

## Group I. Panel tiles

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
No.	Inventory number	Place of location	Chronology	Preserved fragment/ condition	Position of the tile in the stove structure	Fabric type of clay thinning additive	Firing type quality	Glaze type colour	Panel characteristics	Panel decoration technique border composition type of representation	Panel dimensions of preserved fragment (in mm)	Chamber/ Body type	Length of preserved body fragment (in mm)	Usage traces	Place of deposition	Pl. and fig. no	Notes/remarks
1	2/67	Excavation „Studzienka”	XV- XVI	C-D, c-d	2	1 2b	1 1 1	1 1 1	1a	1 2,5 2 1	92/107/10	3 3 3	4	-	MCh	-	-
2	2/67	Excavation „Studzienka”	XV	I, d	3	1 2b	1 1 1	1 1 1	4a	1 6 1 2	70/95/10	3 3 3	-	-	MCh	I.1	-
3	2/67	Excavation „Studzienka”	XV- XVI	B-C, c-d	2	1 3c	1 1 1	1 1 1	2a	1 2,5 2 1	90/187/11	3 3 3	2	-	MCh	-	-
4	2/67	Excavation „Studzienka”	XV	I, d	3	1 3a	2 1 1	2 4a	1 6 1 2	65/90/10	3 3 3	-	-	-	MCh	-	-
5	2/67	Excavation „Studzienka”	XV	I, d	3	1 1c	1 2 1	1 1 4a	1 6 3 2	58/87/9	3 3 3	-	-	-	MCh	-	-
6	2/67	Excavation „Studzienka”	XV- XVI	I, d	3	2 1a	2 2 1	2 1 4a	1 6 1 1	70/95/10	3 3 3	-	-	-	MCh	-	-
7	2/67	Excavation „Studzienka”	XV- XVI	D-E, d	3	1 2a	1 1 1	1,4 1a	1 2 2 1	96/65/10	3 3 3	1	1	-	MCh	-	-
8	11/67	Excavation I/67, are 6/q C, depth 200-320 cm	XV	I, d	3	1 2b	1 1 1	2,5 4a	1 6 3 9	67/73/8	3 3 3	-	-	-	MCh	-	-
9	11/67	Excavation I/67, are 6/q C, depth 200-320 cm	XV	I, d	2	1 2a	1 2 1	4 4a	1 6 3 9	70/85/10	3 3 3	-	-	-	MCh	-	-
10	11/67	Excavation I/67, are 6/q C, depth 200-320 cm	XV	I, d	3	1 3a	1 1 1	5 4a	1 6 3 9	95/73/11	3 3 3	-	-	-	MCh	-	-
11	12/67	Excavation I/67, are 6/q C, depth 200-320 cm	XV- XVI	B-C, b-d	2	1 2b	1 1 1	1 1 1a	1 1,4 1 4	68/134/10	3 2 1	5	5	-	MCh	I.8	Finger prints on the reare side

	Excavation I/67, are 6/q C, depth 200–320 cm	XV– XVI	B b–d	2	1	2c	1	1	1	1	1	1	1	1	4a	1	1,4	1	3	56/90/8	3	2	3	4	–	MCh	I,9	Finger prints on the reate side
12	12/67	Excavation I/67, are 6/q C, depth 200–320 cm	XV– XVI	B b–d	2	1	2c	1	1	1	1	1	1	1	4a	1	1,4	1	3	56/90/8	3	2	3	4	–	MCh	I,9	Finger prints on the reate side
13	12/67	Excavation I/67, are 6/q C, depth 200–320 cm	XV– XVI	A–C, c–d	2	1	1c	1	1	1	1,3	1a	1	1,4	1	1,4	1	3	122/ 122/11	3	2	2	3	–	MCh	I,1	Cf. M. Dąbrowska 1987, fig. 18.	
14	12/67	Excavation I/67, are 6/q C, depth 200–320 cm	XV	G, d–e	3	1	3a	1	1	1,4	4a	1	1,4	3	8	60/87/9	3	3	3	3	3	3	–	–	MCh	–	–	
15	13/67	Excavation I/67, depth ? cm	XV– XVI	I, d	2	1	3a	1	1	1	4	4a	1	6	1	8	55/60/8	3	3	3	3	–	–	MCh	–	–		
16	13/67	Excavation I/67, depth ? cm	XV– XVI	I, d	2	1	2c	1	1	1	4	4a	1	6	1	4	70/60/9	3	3	3	3	–	–	MCh	–	–		
17	13/67	Excavation I/67, depth ? cm	XV– XVI	I, d	3	1	2b	1	2	1	2,3	4a	1	6	2	2	45/68/10	3	3	3	3	–	–	MCh	–	–		
18	13/67	Excavation I/67, depth ? cm	XV– XVI	I, d	3	1	2b	1	1	1	2,3	4a	1	6	3	2	83/75/10	3	3	3	3	–	–	MCh	–	–		
19	13/67	Excavation I/67, depth ? cm	XV– XVI	a	3	1	2b	1	1	–	–	–	–	–	–	–	–	–	–	–	3	2	3	46	–	MCh	–	–
20	13/67	Excavation I/67, depth ? cm	XV– XVI	a	3	1	2c	1	1	–	–	–	–	–	–	–	–	–	–	–	3	2	3	46	–	MCh	–	–
21	13/67	Excavation I/67, depth ? cm	XV– XVI	a	3	1	2b	1	1	–	–	–	–	–	–	–	–	–	–	–	3	2	3	50	–	MCh	–	–
22	13/67	Excavation I/67, depth ? cm	XV– XVI	a	3	1	2b	1	2	–	–	–	–	–	–	–	–	–	–	–	1	2	3	43	–	MCh	–	–
23	13/67	Excavation I/67, depth ? cm	XV– XVI	a	2	1	2a	1	1	–	–	–	–	–	–	–	–	–	–	–	3	2	3	69	–	MCh	–	–
24	13/67	Excavation I/67, depth ? cm	XV– XVI	a	3	1	2c	1	1	–	–	–	–	–	–	–	–	–	–	–	3	2	3	38	–	MCh	–	–
25	13/67	Excavation I/67, depth ? cm	XV– XVI	g	3	1	2b	1	2	–	–	–	–	–	–	–	–	–	–	–	3	2	3	76	–	MCh	–	–
26	13/67	Excavation I/67, depth ? cm	XV– XVI	g	2	1	2c	1	1	–	–	–	–	–	–	–	–	–	–	–	1	2	3	86	–	MCh	–	–
27	13/67	Excavation I/67, depth ? cm	XV– XVI	a	3	1	2b	1	2	–	–	–	–	–	–	–	–	–	–	–	3	2	3	41	–	MCh	–	–
28	13/67	Excavation I/67, depth ? cm	XV– XVI	a	3	1	3a	1	1	–	–	–	–	–	–	–	–	–	–	–	3	2	3	36	–	MCh	–	–
29	13/67	Excavation I/67, depth ? cm	XV– XVI	a	2	1	2b	1	1	–	–	–	–	–	–	–	–	–	–	–	1	2	3	44	–	MCh	–	–
30	13/67	Excavation I/67, depth ? cm	XV– XVI	g	2	1	3b	1	1	–	–	–	–	–	–	–	–	–	–	–	1	1	1	130	–	MCh	–	–

31	16/67	Excavation V/67, are 7/q A, depth 70–160 cm	XV	I, d	3	1	3a	1	1	1	1	1	1	4a	—	—	—	—	50/60/10	3	3	3	—	—	MCh	—
32	16/67	Excavation V/67, are 7/q A, depth 70–160 cm	XV	I, d	3	1	2c	1	1	1	1	1	1	4a	—	—	—	—	35/55/10	3	3	3	—	—	MCh	—
33	16/67	Excavation V/67, are 7/q A, depth 70–160 cm	XV	F, d–e	2	1	3b	1	1	1	1	1	1	4a	—	1,4	—	—	69/71/10	3	3	3	—	—	MCh	—
34	16/67	Excavation V/67, are 7/q A, depth 70–160 cm	XV	I, d	3	1	2a	1	1	1	1	1	1	4a	—	—	—	—	38/25/9	3	3	3	—	—	MCh	—
35	16/67	Excavation V/67, are 7/q A, depth 70–160 cm	XV	I, d	3	1	2b	1	1	1	1	1	1	4a	—	—	—	—	64/58/11	3	3	3	—	—	MCh	—
36	22/67	Excavation V/67, are 6/q B, depth 100–300 cm	XV	H–G, d	2	1	2a	1	1	1	1	2,3	4a	1	6	1	6	88/106/11	3	3	3	—	—	MCh	I.2	
37	24/67	Excavation V/67, are 6/q B, depth 100–300 cm	XV	I, d	3	1	2b	1	1	1	1	1,4	4a	1	6	1	8	63/65/12	3	3	3	—	—	MCh	I.3	
38	25/67	Excavation V/67, are 6/q B, depth 100–300 cm	XV	G, d	3	1	2c	1	1	1	2,3	4a	1	6	1	6	74/94/10	3	3	3	—	—	MCh	I.4		
39	25/67	Excavation V/67, are 6/q B, depth 100–300 cm	XV	G, d	3	1	2b	1	1	1	2,3	4a	1	6	1	6	75/73/11	3	3	3	—	—	MCh	I.5		
40	26/67	Excavation V/67, are 6/q B, depth 100–300 cm	XV	I, d	3	1	2c	1	1	1	2,3	4a	1	6	1	6	59/65/8	3	3	3	—	—	MCh	I.6		
41	37/67	?	XV– XVI	A–B, c–d	2	1	2c	1	1	1	4	1/2a	1	1,5	1	8	102/ 127/12	3	2	1	2	—	—	MCh	II.2	
42	42/67	?	XV	I, d	3	2	1a	1	1	1	5	4a	1	6	1	2	98/150/9	3	3	3	—	—	MCh	I.7		
43	31/68	Excavation VI/68, section B, depth 480–500 cm	XV	I, d	3	1	3a	1	1	1	2	4a	1	6	3	9	97/54/8	3	3	3	—	—	MCh	—		
44	31/68	Excavation VI/68, section B, depth 480–500 cm	XV	I, d	2	1	3b	1	1	1	2	4a	1	6	3	9	56/70/9	3	3	3	—	—	MCh	—		
45	66/68	Excavation X/68, depth 180–200 cm	XV	a	3	1	3a	1	1	—	—	—	—	—	—	—	—	—	—	1	2	3	65	—	MCh	—

Cf.  
M. Dąbrowska  
1987, fig. 16



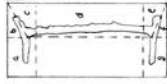
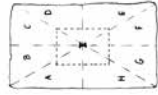
46	72/68	Excavation XI/68, depth ? cm	XV	F-C, d-e	2	1	2b	1	1	1	4-5	1a	1	1,4	2	2	60/70/10	3	3	3	3	3	-	-	MCh	-	-
47	7/69	Excavation VI/68/69, scre of the section	XV	F-C, d	3	1	3a	1	1	1	2	4a	1	6	1	4	50/48/9	3	3	3	3	3	-	-	MCh	-	-
48	30/69	Excavation XV/69, depth 400-420 cm	XV	I,d	3	1	3b	1	2	1	3,4	4c	1	6	3	9	43/39/10	3	3	3	3	3	-	-	MCh	-	-
49	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	B-C, a, c-d	2	1	2a	1	1	1	2,3	1/2a	1	6	1	7	79/94/13	1	2	1	9	1	9	-	MCh	II.3	M. Dąbrowska 1987, fig. 17
50	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	C-H, b-f	2	2	1a	1	1	1	2,5	1a	1	1	1	7	195/ 180/19	1	2	1	3	1	3	-	MCh	II.4	M. Dąbrowska 1987, fig. 17
51	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	I,d	3	2	1a	1	1	1	2,5	4a	1	6	1	7	95/112/11	3	3	3	3	3	-	-	MCh	II.6	M. Dąbrowska 1987, fig. 17
52	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	B-C, b-d	2	1	2a	1	1	1	2,5	1/2a	1	1	1	7	74/94/9	3	3	3	3	3	-	-	MCh	II.5	-
53	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	G-F, d	3	2	1a	1	1	1	2,5	4a	1	6	1	7	94/125/16	3	3	3	3	3	-	-	MCh	II.7	-
54	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	C-D, a-d	2	1	2c	1	1	1	2	1/2a	1	1,4	1	6	122/97/8	1	2	1	33	1	33	-	MCh	III.1	-
55	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	C,d	3	1	2b	1	1	1	2,3	4a	1	6	1	6	122/97/8	3	3	3	3	3	-	-	MCh	III.2	M. Dąbrowska 1987, fig. 16
56	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	I,d	3	1	2c	1	1	1	2	4a	1	6	1	6	56/96/12	3	3	3	3	3	-	-	MCh	I.10	M. Dąbrowska 1987, fig. 16
57	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	C,d	3	1	2b	1	1	1	2	4a	1	6	1	3	78/60/9	3	3	3	3	3	-	-	MCh	III.3	M. Dąbrowska 1987, fig. 18
58	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	F,d	3	1	2c	1	2	1	2	4a	1	6	1	4	47/66/8	3	3	3	3	3	-	-	MCh	I.11	-
59	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	I,d	3	2	1b	1	1	1	3	4a	1	6	3	8	60/60/12	3	3	3	3	3	-	-	MCh	III.4	-
60	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	I,d	3	1	1c	1	2	1	3	4a	1	6	1	10	65/55/8	3	3	3	3	3	-	-	MCh	III.5	-
61	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	C-D, a-d	2	1	2a	1	1	1	2	1/2a	1	1	3	1	81/80/12	1	2	1	80	1	80	-	MCh	III.6	-
62	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	C-E, a-g	1	1	2c	1	2	1	2	3b	2	3,5	1	2	156/102/16	2	1	1	75	1	75	-	MCh	IV.3	-
63	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	B-C, I,a-d	1	1	2b	1	1	1	2,5	3b	2	3,5	1	2	139/100/27	2	1	1	31	1	31	-	MCh	IV.1	M. Dąbrowska 1987, fig. 21

64	33/69	Excavation VI/68-69, depth 420-475 cm	XV- XVI	A-B, G-H, b-f	2	1	2c	1	1	1	1	1	1	1	1	1	1	1	1a	1	1,5	2	5	181/122/10	3	2	3	4	-	MCh	IV.2	M. Dąbrowska 1987, fig. 17
65	49/69	Excavation VII/68- 69, depth 300-360 cm	XV- XVI	I, d	3	1	2b	1	1	1	1	2,3	4a	1	6	1	1	1	55/48/6	3	3	3	3	3	3	3	3	-	-	MCh	-	-
66	50/69	Excavation VIII/68- 69, section A2, depth 360-380 cm	XV- XVI	C-D, b-d	2	1	1c	1	1	1	1	1	1/2a	1	1,5	3	5	100/74/10	1	2	1	73	-	MCh	III.8	M. Dąbrowska 1987, fig. 18	-	-	-	-	-	
67	59/69	Excavation VIII/68- 69, section A1, depth 380-400 cm	XV- XVI	G-H, d	2	1	2a	1	2	1	2,3	1/2a	1	1,5	3	8	92/88/12	3	3	3	3	-	-	MCh	III.9	-	-	-	-	-	-	
68	59/69	Excavation VII/68- 69, section A1, depth 380-400 cm	XV- XVI	I, d	3	1	2b	1	1	1	1	1	4a	1	6	1	3	54/66/8	3	3	3	-	-	MCh	-	-	-	-	-	-	-	-
69	71/69	Excavation VII/68- 69, scree of the section	XV- XVI	I, d	3	1	2a	1	1	1	1	1	4a	1	6	3	9	38/50/9	3	3	3	-	-	MCh	-	-	-	-	-	-	-	-
70	71/69	Excavation VIII/68- 69, scree of the section	XV- XVI	D, d	2	1	2b	1	1	1	1	1/2a	1	1	3	9	40/56/9	3	3	3	-	-	MCh	-	-	-	-	-	-	-	-	-
71	71/69	Excavation VIII/68- 69, scree of the section	XV- XVI	I, d	3	2	2a	2	1	1	2,5	4a	1	6	3	9	63/55/10	3	3	3	-	-	MCh	-	-	-	-	-	-	-	-	-
72	71/69	Excavation VIII/68- 69, scree of the section	XV- XVI	I, d	3	1	3a	1	1	1	1,5	4a	1	6	3	9	29/74/11	3	3	3	-	-	MCh	-	-	-	-	-	-	-	-	-
73	71/69	Excavation VIII/68- 69, scree of the section	XV- XVI	a	2	1	2c	1	1	-	-	-	-	-	-	-	-	-	-	-	1	2	1	56	-	MCh	-	-	-	-	-	-
74	71/69	Excavation VIII/68- 69, scree of the section	XV- XVI	a	2	2	1a	1	1	-	-	-	-	-	-	-	-	-	-	-	1	2	1	82	-	MCh	-	-	-	-	-	-
75	71/69	Excavation VIII/68- 69, scree of the section	XV- XVI	g	3	1	2c	1	1	-	-	-	-	-	-	-	-	-	-	-	3	2	3	60	-	MCh	-	-	-	-	-	-
76	71/69	Excavation VIII/68- 69, scree of the section	XV- XVI	g	3	1	2b	1	1	-	-	-	-	-	-	-	-	-	-	-	3	2	3	55	-	MCh	-	-	-	-	-	-
77	71/69	Excavation VIII/68- 69, scree of the section	XV- XVI	a	2	1	2b	1	2	-	-	-	-	-	-	-	-	-	-	-	1	2	1	68	-	MCh	-	-	-	-	-	-
78	71/69	Excavation VIII/68- 69, scree of the section	XV- XVI	a	3	2	1c	1	1	-	-	-	-	-	-	-	-	-	-	-	3	2	3	40	-	MCh	-	-	-	-	-	-
79	90/69	Excavation VIII/68- 69, section C, depth 460-480 cm	XV- XVI	B-C, c-d	2	1	3a	1	2	1	4	1/2a	1	1	3	1	55/60/9	3	3	3	3	-	1	MCh	-	-	-	-	-	-	-	-
80	90/69	Excavation VIII/68- 69, section C, depth 460-480 cm	XV- XVI	a	3	1	2c	1	1	-	-	-	-	-	-	-	-	-	-	-	3	2	3	35	1	MCh	-	-	-	-	-	-

81	90/69	Excavation VII/68—69, section C, depth 460—480 cm	XV—XVI	a	3	1	2b	1	2	—	—	—	—	—	—	1	2	3	73	1	MCh	—	—	
82	94/69	Excavation XIII/68—69, depth 140—160 cm	XV	I, d	3	1	3a	1	1	2	4a	1	6	1	8	46/79/10	3	3	3	—	—	MCh	—	—
83	126/69	Excavation VIII/68—69, section A, B, scree of the section	XV	G, d—e	2	1	2c	1	2	1	4	1/2a	1	1,4	1	9	50/75/9	3	3	3	—	—	MCh	—
84	6/70	Excavation XVI/70, depth 120—140 cm	XV	I, d	2	1	2,3a	2	1	1	4	4a	1	6	1	8	78/46/12	3	3	3	—	—	MCh	—
85	118/70	Excavation VII/68—70, section G, depth 340—380 cm	XV	g	3	1	2a	1	1	—	—	—	—	—	—	—	1	2	3	50	—	MCh	—	
86	207/70	Excavation II/70, section A, depth 80—120 cm	XV—XVI	a	3	1	1b	1	1	—	—	—	—	—	—	—	3	2	3	66	—	MCh	—	
87	207/70	Excavation II/70, section A, depth 80—120 cm	XV—XVI	g	3	1	2b	1	1	—	—	—	—	—	—	—	3	2	3	34	—	MCh	—	
88	231/70	Excavation II/70, section B, depth 320—380 cm	XV—XVI	I, d	3	2	1b	1	1	1	1	4a	1	6	3	9	45/36/5	3	3	3	—	1	MCh	—
89	231/70	Excavation II/70, section B, depth 320—380 cm	XV—XVI	I, d	3	2	1a	1	1	1	4	4a	1	6	3	9	44/30/5	3	3	3	—	—	MCh	—
90	231/70	Excavation II/70, section B, depth 320—380 cm	XV—XVI	I, d	2	1	2b	1	2	1	4	1a	1	6	3	9	70/68/6	3	3	3	—	—	MCh	—
91	231/70	Excavation II/70, section B, depth 320—380 cm	XV—XVI	I, d	3	1	2b	1	1	1	4	4a	1	6	1	9	35/45/6	3	3	3	—	—	MCh	—
92	231/70	Excavation II/70, section B, depth 320—380 cm	XV—XVI	I, d	3	2	1c	1	2	1	4	4a	1	6	1	9	50/47/5	3	3	3	—	—	MCh	—
93	231/70	Excavation II/70, section B, depth 320—380 cm	XV—XVI	A—B c—d	2	1	2c	1	1	1	3,5	1/2a	1	1,4	1	8	80/98/7	1	2	1	34	—	MCh	—
94	231/70	Excavation II/70, section B, depth 320—380 cm	XV—XVI	a	3	2	1a	1	1	—	—	—	—	—	—	—	1	2	3	50	—	MCh	—	

95	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	a	3	2	1a	1	2	–	–	–	–	–	–	–	–	3	2	3	36	–	MCh	–
96	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	g	3	2	1b	1	1	–	–	–	–	–	–	–	–	3	2	3	41	–	MCh	–
97	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	a	3	2	1a	1	1	–	–	–	–	–	–	–	–	1	2	1	56	–	MCh	–
98	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	g	3	1	1c	1	1	–	–	–	–	–	–	–	–	1	2	1	41	–	MCh	–
99	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	a	3	1	1b	1	1	–	–	–	–	–	–	–	–	3	2	3	38	–	MCh	–
100	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	a	3	1	1c	1	1	–	–	–	–	–	–	–	–	3	2	1	34	–	MCh	–
101	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	a/g	3	1	1b	1	1	–	–	–	–	–	–	–	–	1	2	3	30	–	MCh	–
102	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	a	3	1	1c	1	2	–	–	–	–	–	–	–	–	3	2	3	25	–	MCh	–
103	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	a	2	1	3a	1	2	–	–	–	–	–	–	–	–	1	2	1	60	–	MCh	–
104	231/70	Excavation II/70, section B, depth 320–380 cm	XV– XVI	g	3	1	3b	1	1	–	–	–	–	–	–	–	–	1	2	1	55	–	MCh	–
105	[3/73]	Excavation VII/68– 73, section K, depth 330–410 cm	XV– XVI	I,d	3	1	1c	1	2	1	3	4a	1	6	3	10	34/33/6	3	3	3	–	–	ML	III.7

ad. 5



ad. 6

*Position of the tile in the stove structure:*

- 1 – crown tile
- 2 – middle tile
- 3 – impossible to classify

ad. 7

*Fabric*

*Type of clay:*

- 1 – ferric
- 2 – kaolinitic

*Thinning additive - combination of the features:*

- 1 – fine-grained ( $\leq 0,5$  mm)
  - 2 – medium-grained ( $> 0,5; \leq 1$  mm)
  - 3 – coarse-grained ( $> 1$  mm)
- a – little  
b – moderately  
c – a lot of

ad. 8

*Firing*

*Type:*

- 1 – oxidizing
- 2 – reducing

*Quality:*

- 1 – good
- 2 – insufficient

ad. 9

*Glaze*

*Type:*

- 1 – lead
- 2 – lead-tin

*Colour:*

- 1 – dark green
- 2 – light green
- 3 – olive
- 4 – brown
- 5 – yellow

ad. 10

*Panel characteristics*

*Features combinations:*

- 1 – square
  - 2 – rectangular
  - 3 – triangular
  - 4 – impossible to classify
- a – panel  
b – arched  
c – niche-tile

ad. 11

*Panel decoration*

*Technique:*

- 1 – relief
- 2 – tracery

*Border:*

- 1 – simple
- 2 – double
- 3 – multiple
- 4 – frame straight
- 5 – frame profiled
- 6 – no frame

*Composition:*

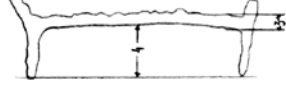
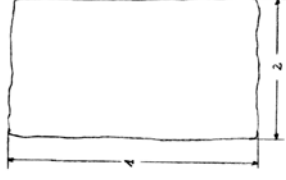
- 1 – asymmetric
- 2 – symmetric

3 – impossible to classify

*Type of image – motives:*

- 1 – floral
- 2 – architectural
- 3 – ornimorphic – crowned eagle
- 4 – ornimorphic – unclassified motif
- 5 – anthropomorphic – Resurrected Christ
- 6 – anthropomorphic – temptation of Eve and Adam in paradise scene
- 7 – anthropomorphic – st Gregory killing the dragon
- 8 – anthropomorphic – knight (king?) on horseback
- 9 – anthropomorphic – unclassified motif
- 10 – unclassified motives

ad. 12 i 14



*Panel dimensions of preserved fragment (in mm) – as follows:*

- 1 – maximum width
- 2 – maximum length
- 3 – maximum thickness of potsherd
- 4 – maximum depth of body fragment

ad. 13

*Chamber/Body*

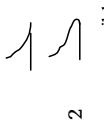
*Type:*

- 1 – open
- 2 – closed
- 3 – impossible to classify

*Walls:*

- 1 – intact
- 2 – preserved partially
- 3 – unpreserved

*Method of attaching to panel:*



2

3 – impossible to classify

**ad. 15**

*Usage traces:*

1 – soot traces

2 – secondary firing

**ad. 16**

*Place of deposition:*

MCh – Irena and Mieczysław Mazaraki Museum in Chrzanów

ML – Lipowiec Castle depot

Group II. Pot and beaker tiles

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
No.	Inventory number	Place of location	Chronology	Type of tiles	Preserved fragment/condition	Fabric	Firing	Glaze	Technique	Opening shape	Walls shape	Decoration	Dimensions of preserved fragment (in mm)	Usage traces	Place of deposition	Notes/remarks	
				bowl tiles pot tiles		type of clay	type	quality					maximum width and length or diameter				
						thinning additive	type	colour					maximum thickness				
								type					maximum height				
1	8/67	Excavation I/67, are 9/ c A, depth 480 cm	XV	+	B	1 2c	1 2	1 1/2	1	2	1	-	108	9	67	-	MCh
2	8/67	Excavation I/67, are 9/ c A, depth 480 cm	XV	+	C	1 2b	1 1	1 1	1	3	2	-	38/20	10	40	-	MCh
3	44/69	Excavation VII/68-69, section A2, depth 120-140 cm	XV/XVI	-	B-C	1 1c	1 1	-	1	1	1	-	60/58	10	60	-	MCh
4	44/69	Excavation VII/68-69, section A2, depth 120-140 cm	XV/XVI	-	C	1 1c	1 2	-	1	1	1	-	30/45	8	40	-	MCh
5	59/69	Excavation VII/68-69, section A1, depth 360-380 cm	XIV/XV	+	B	1 3a	1 2	-	1	1	2	-	40/59	7	50	-	MCh
6	59/69	Excavation VII/68-69, section A1, depth 360-380 cm	XIV/XV	+	A	2 1a	1 1	-	1	2	2	-	140	7	38	-	MCh
7	59/69	Excavation VII/68-69, section A1, depth 360-380 cm	XIV/XV	+	A	2 1b	1 1	-	1	2	2	-	140	7	43	-	MCh
8	63/69	Excavation VII/68-69, section A1, depth 400-460 cm	XV	+	B-C	1 3a	1 2	-	1	2	1	-	140	8	73	-	MCh
9	63/69	Excavation VII/68-69, section A1, depth 400-460 cm	XV	-	C	1 3a	1 2	-	1	1	1	-	70/66	5	50	-	MCh
10	71/69	Excavation VII/68-69, scree of the section	XIV/XV	-	A-C	1 3a	1 1	-	1	1	1	-	80/65	6	160	-	MCh
11	71/69	Excavation VII/68-69, scree of the section	XIV/XV	-	C	1 3b	1 2	-	2	1	1	-	57/60	6	40	-	MCh
12	71/69	Excavation VII/68-69, scree of the section	XIV/XV	-	C	1 3a	1 1	-	1	1	1	-	45/50	6	57	-	MCh



13	190/70	Excavation II/70, section A, depth 280–320 cm	XV	-	+	A	1	2b	1	2	-	-	2	3	1	-	67/60	8	30	-	MCh	-
14	203/70	Excavation I/67-68, scree of the section	XV	-	+	A-B	1	3a	1	2	-	-	1	2	2	-	130	8	54	-	MCh	-
15	231/70	Excavation II/70, section B, depth 320–380 cm	XV	-	+	B	1	2c	1	2	-	-	1	1	2	-	78/90	6	60	1	MCh	-

ad. 6



ad. 7

*Fabric*

*Type of clay:*

- 1 – ferric
- 2 – kaolinitic

*Thinning additive – combination of the features:*

- 1 – fine-grained ( $\leq 0,5$  mm)
- 2 – medium-grained ( $> 0,5; \leq 1$  mm)
- 3 – coarse-grained ( $> 1$  mm)

a – little

b – moderately

c – a lot of

ad. 8

*Firing*

*Type:*

- 1 – oxidizing

*Quality:*

- 1 – good
- 2 – insufficient

ad. 9

*Glaze*

*Type:*

- 1 – lead

*Colour:*

- 1 – dark green
- 2 – olive

ad. 10

*Technique:*

- 1 – thrown
- 2 – hand built and wheel-finished

ad. 11

*Opening shape:*

- 1 – square
- 2 – circular

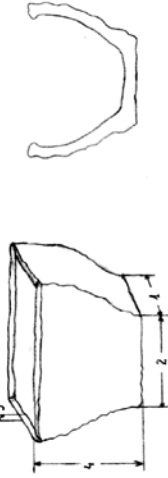
3 – impossible to classify

ad. 12

*Walls shape:*

- 1 – walls straight
- 2 – walls profiled

ad. 14



*Dimensions of preserved fragment (in mm):*

- 1 – maximum width
- 2 – maximum length
- 3 – maximum thickness
- 4 – maximum height

ad. 15

*Usage traces:*

- 1 – soot traces

ad. 16

*Place of deposition:*

MCh – Irena and Mieczysław Mazaraki Museum in  
Chrzanów

# Bibliography

## Primary sources:

*Codex Diplomaticus Poloniae*, vol. 3, Warszawa 1858.

Długosz J., *Liber Beneficiorum Dioecesis Cracoviensis*, vol. 2: *Ecclesiae parochiales*, Cracoviae 1864.

Starowolski S., *Polska albo opisanie położenia Królestwa Polskiego*, Kraków 1976.

## Secondary sources:

Abraham W., *Sprawa Muskaty*, Kraków 1893.

Antoniewicz M., *Zamki na Wyżynie Krakowsko-Częstochowskiej. Geneza – Funkcje – Konteksty*, Kielce 1998.

Arnold S., *Geografia historyczna Polski*, Warszawa 1951.

AS/AW [A. Siemaszko, A. Włodarek], *Babice*, in: *Architektura gotycka w Polsce*, t. 2: *Katalog zabytków*, red. T. Mroczo, M. Arsyński, Warszawa 1995, pp. 21–22.

Barycz H., *Historja Uniwersytetu Jagiellońskiego w epoce humanizmu*, Kraków 1935.

Bogdanowski J., *Architektura obronna w krajobrazie Polski. Od Biskupina do Westerplatte*, Warszawa 1996.

Buśko C., *Nurt dworski w ikonografii kaflí śląskich*, in: *Kultura średniowiecznego Śląska i Czech. Zamek*, red. K. Wachowski, Wrocław 1996, pp. 51–60.

Cabalska M., *Wczesne średniowiecze*, in: *Ziemia Chrzanowska i Jaworzno. Monografia*, red. B. Ferenc, Kraków 1969, pp. 134–137.

Chorowska M., *Rezydencje średniowieczne na Śląsku. Zamki, pałace, wieże mieszkalne*, Wrocław 2003.

Chrzanowski T., Kornecki M., *Sztuka Ziemi Krakowskiej*, Kraków 1982.

Darnowska-Łukaszewska J., Jacniacka M., *Jerzy z Kapadocji. Ikonografia*, in: *Encyklopedia Katolicka*, t. 7, Lublin 1997, col. 1225–1227.

- Dąbrowska M., *Kafle i piece kaflowe w Polsce do końca XVIII wieku*, Wrocław—Warszawa—Kraków—Gdańsk—Łódź 1987.
- F.S. [F. Sikora], *Lipowiec*, in: *Słownik historyczno-geograficzny województwa krakowskiego w średniowieczu*, red. A. Gąsiorowski, cz. 3, z. 3, Kraków 2000, pp. 670—675.
- Forster D., *Świat symboliki chrześcijańskiej*, [original title *Die Welt der christlichen Symbole*], tłum. W. Zakrzewska, P. Pachciarek, R. Turzyński, Warszawa 1990.
- Fros H., Sowa F., *Księgą imion i świętych*, t. 3, Kraków 1998, col. 284—288.
- Gaczol A., *Zamek Lipowiec*, "Spotkania z Zabytkami" 6 (1986), pp. 36—38.
- Gruszecki A., *Zamki i pałace małopolskie w XVI w. Cechy reprezentacyjno-mieszkaniowe i obronne*, Warszawa 1986.
- Guerquin B., *Zamki śląskie*, Warszawa 1957.
- Guerquin B., *Zamki w Polsce*, Warszawa 1974.
- Inglot S., *Stan i rozmieszczenie uposażenia biskupstwa krakowskiego w połowie XV wieku. Próba odtworzenia zaginionej części "Liber Beneficiorum" Długosza*, t. 2, Lwów 1925.
- Kajzer L., *Z badań nad chronologią i rozplanowaniem zamku w Raciążku*, "Ziemia Kujawska" 7 (1985), pp. 59—70.
- Kajzer L., *Zamek w Raciążku na Kujawach w świetle nowszych badań*, "Zapiski Kujawsko-Dobrzyńskie", pp. 9—24.
- Kajzer L., *Zamek w Raciążku*, Łódź 1990.
- Kajzer L., *Zamki i społeczeństwo. Przemiany architektury i budownictwa obronnego w Polsce w X—XVIII wieku*, Łódź 1993.
- Kamińska J., *Obronność siedzib rycerskich w świetle archeologii*, in: *Początki zamków w Polsce*, "Prace Naukowe Instytutu Historii Architektury, Sztuki i Techniki Politechniki Wrocławskiej" 12 (1978), pp. 23—32.
- Kłosińska J., *Ikony*, Kraków 1973.
- Kołodziejcki S., *Gabriel Leńczyk — prekursor archeologii średniowiecza i okresu nowożytnego w Polsce*, "Teki Krakowskie" 16 (2009), pp. 76—81.
- Kołodziejcki S., *Geneza obronnych rezydencji możnowładztwa w Polsce Piastowskiej*, in: *Castrum, urbis et bellum*, red. G. Semânčuk, A. Mâcel'ski, Baranavičy 2002, pp. 232—236.
- Kołodziejcki S., *Obronne siedziby biskupów krakowskich. Zarys problematyki badawczej*, in: *Siedziby biskupów krakowskich na*

- terenie dawnego województwa sandomierskiego. *Materiały z sesji naukowej. Kielce 20 Sep. 1997*, red. L. Kajzer, Kielce 1997, pp. 17–22.
- Kołodziejski S., *Średniowieczne rezydencje obronne możnowładztwa na terenie województwa krakowskiego*, Kraków 1994.
- Kołodziejski S., *Uwagi o średniowiecznym budownictwie obronnym biskupów krakowskich*, "Teki Krakowskie" 3 (1996), pp. 135–149.
- Kopaliński S., *Słownik symboli*, Warszawa 1990.
- Kracik J., Ryś G., *Dziesięć wieków diecezji krakowskiej*, Kraków 1998.
- Krzyżanowski S., *Słownik heraldyczny dla pomocy w poszukiwaniach archeologicznych*, Kraków 1870.
- Lasota C., Rozpędowski J., *Wczesnogotycki dwór książęcy w Jelczu koło Oławy*, "Prace Naukowe Instytutu Historii Architektury, Sztuki i Techniki Politechniki Wrocławskiej" 15 (1981).
- Leńczyk G., *Drugie sprawozdanie z inwentaryzacji i planowania grodzisk w woj. Krakowskiem w r. 1933*, "Sprawozdania z Czynności i Posiedzeń Polskiej Akademii Umiejętności" 34 (1934), z. 3, pp. 28–33.
- Leńczyk G., *Grodziska i zamczyska w województwie krakowskiem*[], "Z Otchłani Wieków" 9 (1934), pp. 47–50.
- Lipińska O., *Z badań nad wczesnośredniowiecznym osadnictwem północnej części Przedgórza Łżeckiego*, in: *Materiały z sesji naukowej "Pradzieje wczesne średniowiecze w dorzeczu Kamiennej" 19–20.10.1986*, Ostrowiec Świętokrzyski 1989, pp. 66–82.
- Ładogórski T., *Studia nad zaludnieniem Polski XIV wieku*, Wrocław 1958.
- Łepkowski J., *Przegląd zabytków przeszłości z okolic Krakowa*, Warszawa 1863.
- Łuszczkiewicz W., *Zamek Lipowiec i jego turma*, Kraków 1884.
- Małkowska-Holcerowa T., *Lipowiec. Dawny zamek biskupów krakowskich*, Warszawa 1989.
- Modzelewski K., *Między prawem książęcym a władztwem gruntowym*, vol. 2: *Instytucje kasztelanii majątkowych Kościoła w Polsce XII–XIII w.*, "Przegląd Historyczny" 71 (1980), z 2, pp. 449–480.
- Modzelewski K., *Organizacja gospodarcza państwa piastowskiego (X–XIII wiek)*, Wrocław–Warszawa–Kraków–Gdańsk 1975.
- Motyka J., *Kasztelania Chrzanowska*, in: *Chrzanów. Studia z dziejów miasta i regionu do roku 1939*, Chrzanów 1998, pp. 42–57.
- Okoński J., *Metoda opracowania zbiorów kafil z badań archeologicznych. Przykład zamku w Nowym Wiśniczu, woj. Tarnowskie*, Warszawa 1984.

- Okoński J., *Z badań nad typologią i zmiennością dekoracji kafli w Polsce*, Warszawa 1988.
- Pauk M. R., *Funkcjonowanie regale fortyfikacyjnego w Europie Środkowej w średniowieczu*, "Kwartalnik Historii Kultury Materialnej" 51 (2003), pp. 3–16.
- Pavlík Č., Vitanovský M., *Encyklopedie kachlů v Čechách, na Moravě a ve Slezsku. Ikonografický atlas reliéfů na kachlích gotiky a renesance*, Prague 2004.
- Pierzak J., *Średniowieczny Sławków odsłania swoje tajemnice*, Katowice 1988.
- Piskadło A., *Grody, zamki, fortece. Budownictwo i architektura obronna do schyłku średniowiecza*, Warszawa 1977.
- Przybyszewski B., *Zarys dziejów diecezji krakowskiej (do roku 1999)*, Kraków 2000.
- Rymut K., *Nazwy miejscowe północnej części dawnego województwa krakowskiego*, Wisła 1968.
- Schauber V., Schindler H. M., *Ilustrowany leksykon świętych*, Kielce 2002.
- Schauber V., Schindler H. M., *Święci na każdy dzień. Patroni naszych imion*, Warszawa 2000.
- Sobieski W., *Dzieje Polski*, t. 1, *Do roku 1696*, Warszawa 1923.
- Smoleńska J., *Śląskie kafle średniowieczne w zbiorach Muzeum Narodowego w Warszawie*, "Rocznik Muzeum Narodowego w Warszawie" 19 (1975), pp. 265–283.
- Szydłowska T., *Gotyckie i renesansowe kafle w muzeach Górnego Śląska (katalog wystawy)*, Bytom 1973.
- Świechowska A., *Wykopaliska na zamku w Wenecji pod Żninem*, "Biuletyn Historii Sztuki" 9 (1949).
- Wojciechowski Z., *Państwo polskie w wiekach średnich. Dzieje ustroju*, Poznań 1948.
- Wójcik M.L., *Ród Gryfitów do końca XIII wieku. Pochodzenie – genealogia – rozsiedlenie*, Wrocław 1993, pp. 213–232.
- Zabytki Sztuki w Polsce. Śląsk*, red. S. Brzezicki, Ch. Nielsen, Warszawa 2006.
- Zagórowski O., *Lipowiec zamek biskupi i dom poprawy dla księży*, "Nasza Przeszłość" 12 (1960), pp. 173–220.
- Zlat M., *Zamek średniowieczny jako problem historii sztuki*, n: *Początki zamków w Polsce*, "Prace Naukowe Instytutu Historii Architektury, Sztuki i Techniki Politechniki Wrocławskiej" 12 (1978), pp. 97–111.

## Documentation:

Muzeum im. Ireny i Mieczysława Mazarakich w Chrzanowie, ref. K/246,  
*Lipowiec – zamek, woj. krakowskie. Zabytki archeologiczne.*  
*Dokumentacja konserwatorska wykonana na zlecenie Pracowni*  
*Archeologiczno-Konserwatorskiej PKZ o/Kraków, Kraków 1973*  
[a typescript from the archival collections of the Regional  
Centre for Research and Documentation of Heritage in Kraków,  
documentation received from VCoM in Kraków].

# Abstrakt

Joanna Małocha

*Analiza technologiczno-ikonograficzna  
średniowiecznych kafli z zamku Lipowiec*

**Słowa kluczowe:**

zamek  
Lipowiec; kafle  
średniowieczne;  
motyw  
ikonograficzny  
Adama i Ewy,  
św. Jerzego  
i Chrystusa  
w studni.

Zamek Lipowiec (gm. Babice, pow. Chrzanów, woj. małopolskie) od przełomu XIII i XIV stulecia odgrywał istotną rolę w dziejach Małopolski oraz Kościoła krakowskiego. W kolejnych wiekach był on nie tylko warownią i rezydencją hierarchów, ale także miejscem rekolekcji dla duchownych oraz więzieniem biskupim. Obecnie – zachowany w formie trwałej ruiny – stanowi jedną z ciekawszych atrakcji turystycznych regionu. Profesjonalne badania historyczne, architektoniczne i archeologiczne tego obiektu zostały jednak przeprowadzone dopiero w drugiej połowie XX wieku, a pozyskany wówczas materiał zabytkowy do dziś nie doczekał się szczegółowego opracowania. Niniejszy artykuł zawiera propozycję analizy zespołu średniowiecznych kafli, odkrytych podczas prac badawczych z lat 1967–1974. Omówienie uwzględnia zarówno aspekt technologiczny, jak i analizę ikonograficzną zabytków. Zaprezentowano również przesłanki, które posłużyły do ustalenia chronologii zespołu – analogie technologiczne i stylistyczne oraz informacje wynikające z pozycji stratygraficznej danego znaleziska. Integralną część artykułu stanowią tablice z rycinami oraz katalog omówionych obiektów z podziałem na kafle płytowe (grupa I) oraz garnkowe i miskowe (grupa II).



# Abstract

Joanna Małocha

*Technological and iconographic analysis of medieval tiles of the Lipowiec castle*

Since the turn of the thirteenth and fourteenth centuries the Lipowiec castle (the municipality of Babice, the district of Chrzanów, Lesser Poland Voivodeship) has played an important role in the history of the Church in Kraków and Lesser Poland. In the following centuries it was not only a fortress and residence of the hierarchy, but also a place of retreat for clergy and an episcopal prison. At the present time – preserved in the form of a permanent ruin – the castle serves as one of the most interesting attractions of the region. Professional historical, architectural and archaeological studies of this property were carried out in the second half of the twentieth century but the historical material obtained in the course of the examination has not been a subject of a detailed analysis as yet. The article presents an analysis of an ensemble of medieval tiles discovered during the study in the years 1967–1974 and includes both technological aspects as well as an analysis of iconographic relics. It also presents evidence that was used to determine the chronology of the ensemble – technological and stylistic analogies as well as information resulting from the stratigraphic position of the given finding. An integral part of the article is an array of prints and a catalog of the discussed objects divided plate-like tiles (group I) and pottery and bowl tiles (group II).

**Keywords:**  
the Lipowiec Castle; medieval tiles; iconographic theme of Adam and Eve, St. George and Christ in the well.

