

Muz., 2021(62): 41-52  
Annual, eISSN 2391-4815

received – 01.2021  
reviewed – 02.2021  
accepted – 02.2021  
DOI: 10.5604/01.3001.0014.8755

# TRADITIONAL WOODWORKING TOOLS. A HISTORIAN'S COLLECTION

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...  
...He bought those planks and slats, all coarse,  
The town's cabinetmaker, John Smith, of course.  
No other master's rivalled his exquisite manner!  
With glue, he took a saw, a plane, a hammer,  
Then measured, smoothed, worked, and put paste,  
Nailed, painted, to finally have a table made.

Julian Tuwim, fragment of the poem *A Table* (transl. M. Iwińska)

Julian Tuwim's poem *A Table*, defined by literary critics as an educational fairy tale, with simplicity and charm makes children acquainted with, to use the language of the period, production process of a wooden piece of utility equipment and the individuals that conduct this process, facilities, and techniques. They are as follows: the forest: in the language of foresters and wood technology specialists considered until today as the economic resource for gaining wood pulp (!); forest workers: woodcutters who traditionally fell trees with axes (not saws); transportation: also traditional, thus with wagons and cart drivers; a sawmill, where wood is initially worked, undergoing log rubbing with *whirring saws*, so-called frame saws; timber yard with wood grades. Finally, the process climaxes with an independent craftsman, a guild master in cabinetmaking with his urban workshop (however with no journeymen and apprentices!), using his *manner* and manual final working of wood (measuring, planning, pasting, painting) with a set of tools: *a saw, a plane, a hammer, and paste*.<sup>1</sup>

When analysing the text as a source, a reader-historian will perceive in it something more than a description of a technological process. It is the universal formula identified

by the poet in a simple example of a table, always composed of three essential elements: creator + method + material = work.

Obviously, the main goal of the activity and the object in social demand is the work, namely the final outcome of the creative process and the object of a more or less conspicuous consumption: both in the strictly utilitarian sense, and also a broader, cultural, and prestigious meaning, as in the case of outstanding authors' works representing different arts and sciences. The popular expression of the interest in the latter is their developed amassing and collecting: individually or in an institutionalized way, namely museology.

The method, thus the working technique and tools, recedes to the background of social demand, being usually the object of interest of merely professionals-practitioners, more rarely of researchers-specialists and fans-amateurs. Why is it so? The tools in their essence also remain, after all, works of added causative value, however regardless of this they are perceived as sub-standard, and thus somewhat inferior. What influences such an attitude? Is it because they have their utilitarian, thus practical function?



1. Joiner's workshop from the mid-16<sup>th</sup> century: manual woodworking with a wooden frame saw and a German-type plane with a 'nose', namely a hand-grip for the left hand; also visible: joiner's bench: woodworking bench with bench stops and tools: long planes, so-called fore planes, carpenter's squares, a compass, marking gauges, chisels, gimlets, and a stump and axe for carpentry; material: unedged timber and planks; the final product: a chest of frame-and-panel structure with wooden panels featuring an intricate ring pattern. Wood engraving by Jost Amman, *Der Schreiner*, in: *Stände und Handwerker*, Frankfurt am Main 1568

Assuming after Thorstein Veblen and his already classical *Theory of the Leisure Class*,<sup>2</sup> the phenomenon of collecting (in its colloquial meaning of the term) to be a para-scientific or (and) para-artistic activity, the collectors of apparatuses and production tools, as distinct from connoisseurs amassing works of art, used to have in the past and may still have problems with their prestige or PR. All because their passion may not be perceived as an activity consolidating the position of the social elites from Veblen's realm of *conspicuous leisure and consumption*, yet as a testimony to having a connection or even affirmation of labour degrading one's image, being the domain of social classes traditionally regarded as inferior.<sup>3</sup>

Is it so, and if, to what degree does the question of the conservatively perceived social prestige, consolidated also by conspicuous consumption, in daily contact with so-called high-art, affect even today the popularity of collecting tools of various crafts and professions, including noble, after all, woodworking? It seems that it continues to have an impact, although the scale of the phenomenon is varied geographically and dependent on many factors, of which two matter most.

The first factor relates to the sphere of productivity: this is the level of technological advancement, a large production scale, and its ample social background resulting in market

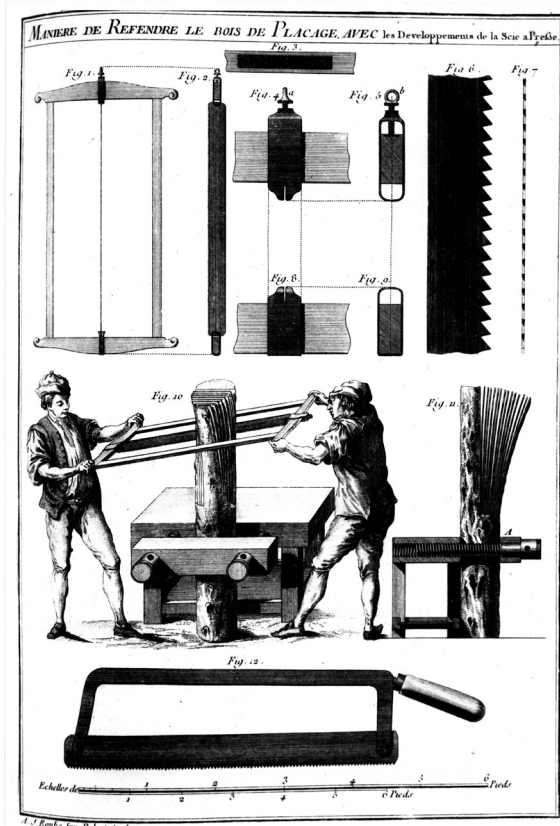
saturation with interesting tools, years later with the richness of preserved high-profile objects which can be objects of collectors' interests of late heirs well nested in the generational tradition as goods of tangible culture. Generally, such a model is implemented by contemporary post-industrial societies of West-European countries.

The second factor stems from the sphere of social awareness, hard to grasp and less measurable, and it is the world view of collectors, members of the community to a varied degree affirming work as well as its material and spiritual culture. High level of this culture favours the development of interest in collecting utilitarian objects, in the feudal past burdened with social odium, which, however, along with progress, particularly in modern progressive societies of Protestant tradition, effectively free themselves from their negative utilitarian connotations.

Without going into a detailed analysis of woodworking tools in Poland and in the countries of Western Europe, which currently can only be a far-fetched research goal, reaching well beyond the scope of a brief presentation of a private collection, it can be worthwhile to signal the disadvantage of Poland as far as the market size is concerned, both in supply, and in the collectors' demand for tools, woodworking ones included. There is an easy way of confirming this: just going to a flea market in Warsaw or in another Polish city, comparing it to London's Portobello Road Market or Rome's Mercato de Pora Portese. The difference in potentials of both places of trade exchange in Poland and Western Europe is essential. The synthetic measure of technological, and therefore civilizational distancing, can also be found in the dates of the editions of the first fully professional and scientific publications: European versus Polish related to the woodcarving craft distanced by 100 and 200 years respectively.<sup>4</sup>

A preliminary assessment of the available resources, technical and aesthetical standards, as well as the state of preservation of old carpentry tools in European countries can be easily made by entering various language versions for 'old woodworking tools' in Google: *Old carpentry tools*, *Alte schreiner Werkzeuge*, *Vieux outils de menuiserie*, *Gamle snickerivertyg*, *Herramientas de carpintería antiguas*, etc. The differences are striking. Collecting patterns and models for functioning of contemporary tool collections in Europe can be found in the following examples: the English Tools and Trades History Society (founded 1983) and the extensive collection of English woodworking items of Ken Hawley at the Kelham Island Museum in Sheffield, or for a change a small, but living, i.e., utilized collection of the traditional joiner Richard Arnold in Wilbarston, in Northamptonshire; finally those accessible online, sometimes with support (information on woodworking manufacturers from the turn of the 20<sup>th</sup> century and scans of company catalogues), such as the precious for the knowledge it conveys Austrian Kleines Werkzeugmuseum collection of Wolfgang Jordan of Vienna and other German and American websites, e.g. Hobel & Axt, Alte Beitel and The Superior Works.<sup>5</sup>

The model to aspire to and a real collectors' dream in the European perspective can be found in the high-profile collection of woodworking tools (the majority of them from the Netherlands which was the first modern centre of their



2. Illustration in an 18<sup>th</sup>-century joinery manual: method of rubbing a log into veneers (face veneer) with a modern stretch; visible: frame saw, so-called log saw, tension mechanism of the sawtooth and saw teeth, method of rubbing a log in a vise stand, metal fine-toothed frame saw to cut face veneer. Plate 278, in: A. J. Roubo, *L'art. du menuisier*, Part III, Section 3, Paris 1771–1774

manufacturing) deposited at Sweden's Skokloster Castle, amounting to over 300 items from the 17<sup>th</sup>–18<sup>th</sup> centuries, amassed for the Castle's construction and use by the client Field Marshal Carl Gustav Wrangler and his successors. Woodworking and other tools: evidently regarded to be as precious as top-quality scientific and research apparatus and numerous art pieces, as if encapsulated in time in the unheated until today interiors of the Castle Museum, have all lasted until today. It can be judged that apart from other favourable circumstances they have survived also thanks to the egalitarian practicality of Swedish society who created IKEA in the 20<sup>th</sup> century!<sup>6</sup>

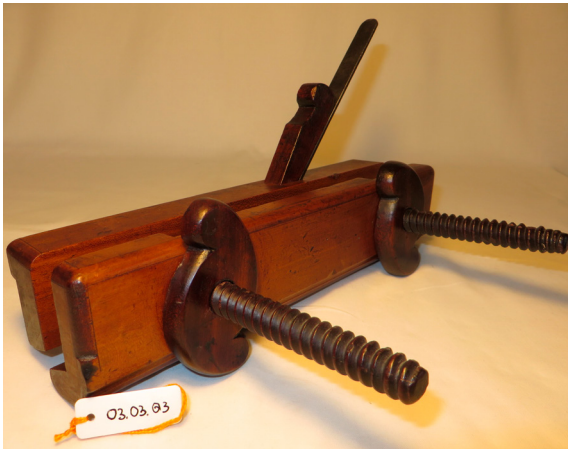
The issue of the importance of traditional tools (not merely woodworking ones) as historic monuments of culture requires new studies and new evaluations. From the point of view of a historian and an amateur collector it seems that in the countries of the European West, particularly in Germany and Great Britain, craftsmen's tools and early industrial ones, in the process of cultural promotion have already reached the status of, or are very close to, semiophores, i.e., museum objects which have definitely lost their original utility function, and have become collector's items as cultural carriers of meanings. In the formalized hierarchy of museum objects they can be assigned the position between purgatory, namely the place of collectors and a heritage object.<sup>7</sup>

In Poland a set of old woodworking tools of, let us say, museum and collector's potential, incites a definitely smaller interest than in Western countries. The difference can also be found in the peculiar rusticalization: tools of all wood-related crafts (joiners, carpenters, wheelwrights, coopers) can be much more readily encountered in rural open-air museums than in such urban institutions, and if at all, then in an ethnography-profiled one. This falsifies, and possibly reverses, the image of the historical reality in which carpentry (particularly cabinetmaking) ranked among urban crafts, and it was only the development of industrial production in the second half of the 19<sup>th</sup> century that made it recede to the rural niche.<sup>8</sup> Thus it would seem appropriate not to apply such folkloristic regionalization of woodworking tools. The same planes can be found in Mazovia and in Subcarpathia, though obviously the furniture made with their use may be and is different.

Urban museums, if interested in guild output at all, cherish interest predominantly in artistic crafts, e.g. the Museum of Artistic and Precise Crafts in Warsaw; at the National Museum in Gdansk, being a major centre of historic cabinetmaking, only the products, namely furniture pieces, are displayed, while the methods: workshops and tools are absent.<sup>9</sup> Neither have tools been on display nor plans have been made for tool display at the still not reopened National Museum of Technology in Warsaw. At urban historical and ethnographic museums woodworking tools are rare exhibits. The exception proving the rule can be found in Cracow and its Seweryn Udziela Museum of Ethnography; collecting traditional woodworking tools, since 2015 it has been conducting research into wood- and metalworking workshops in Lesser Poland.<sup>10</sup> At open-air museums and regional ones what can be found are usually interiors of carpenter's workshops with few and not precisely described tools from the 19<sup>th</sup>–20<sup>th</sup> centuries. Among the more interesting collections mention should be made of the following: Craft Museum in Krosno, Museum of Carpentry and Biskupizna in Krobia (Greater Poland), mounted in the



3. Cooper's circular plane for working the interior barrel surfaces, Poland, Lower Silesia, 2<sup>nd</sup> half of the 18<sup>th</sup> c. (?); craft product, pear tree wood (?), beech wood wedge; iron: blacksmith's product; 'S' signature on the body; the 'nose' in the shape of a simplified volute, front stock ledge missing, cut out and die cut ornamentation, dicing, signature, smith's-made iron, also wood variety make up the historic value of the tool



4. Adjustable dovetail plane for dovetailed slats, Poland, Greater Poland, 1<sup>st</sup> half of the 19<sup>th</sup> c. (?): craft product, hazel wood and pear tree wood (?); no signs of use, horizontal fence on relatively thin wooden screws stabilized with flat nuts echoing period rocailles typical of older planes, in the early 20<sup>th</sup> c. replaced with rotund nuts

interiors of a pre-WW II small furniture factory, National Museum of Agriculture and Agro-Food in Szreniawa, West Pomerania Museum in Bytowo, and the didactic collection at the pre-WW II wood-working school in Nowe on the Vistula (currently a Complex of Post-Secondary-Level Schools), i.e., in the town which provided a powerful backup to Gdansk's cabinetmaking.<sup>11</sup> Interestingly, the above-mentioned museums are located in their majority in north-western Poland, this in a sense confirming the common judgement that these regions boasted a slightly higher technological advancement than the rest of the Polish territory.

An important factor affecting the realities of amassing and collecting hand woodworking tools is the disappearance of cabinetmaking and carpentry as crafts, their output replaced by mass- and machine-produced wood elements, in the course of the 20<sup>th</sup> century more and more frequently by elements made of substitute wood-derived materials and plastics. Furthermore, the advancing mechanization of their working leads to the disappearance of traditional craft workshops as a historically established social, cultural, and production model, with the workshop equipment, namely the tools, losing their rationale. Currently, wood-working by hand, its techniques and tools, are the domain of a scarce community of artistic cabinet makers and furniture conservators. From the museological point of view this is a model situation: on the one hand, the tools have been separated from the *sphere of their appropriate economic activities*, which is a precondition enabling their professional collecting, while on the other, their social status continues low, decreasing their chance to survive as historic objects: objects of interest to collectors. Someone who is only a nascent collector has to accept with much pain that *in the course of the selection with time only a part of those objects* [here: woodworking tools] *will last to receive the status of historic ones*,<sup>12</sup> to become a permanent element in cultural tradition thanks to institutionalized care. One can do nothing but hope that this part is not too small to fulfil its future function, though regrettably, Polish historical experience has not been too optimistic in this respect.

The motivation behind the creation of the discussed collection was not (at least initially) the professionally extended historical awareness and the urgency to save woodworking tools. The actual motive was admiration for their sophisticated practicality and skill of working the exquisite natural material that wood is. With the benefit of hindsight, I guess I could say that I was doomed to collect woodworking tools, maybe genetically, because of one of my great-grandfathers. What other hobby could I have had as a historian whose professional activity has been fulfilled at the Royal Castle in Warsaw, thus having been a museum curator-practitioner, and being someone who has since childhood been passionate about carving out in tree bark or wood, and immediately afterwards, about modelling. Already as a secondary-school and University student I felt the urge to master the rudimentary skills of woodworking; I amassed basic tools, and applied them to make pieces of furniture and other equipment for domestic purposes. In the early 1980s, I followed a professional training and organized my own workshop equipped with electric tools manufactured by the English Black & Decker Company. It was in that very workshop that following each exam, and later a major intellectual effort (a published paper or an exhibition), in order to release stress, I would simply make something of wood with my own hands! Promptly afterwards, thanks to my museum colleagues who were conservators and art historians dealing with cabinetmaking, I discovered the charm of old wood, old furniture, and of old tools... As a result, I began collecting old woodworking tools which I consciously began to amass in 1982 as no longer utilitarian objects, however, in majority in working order.

In 1989, the collection became of interest to a group of historians from the Institute of History of Material Culture of the Polish Academy of Sciences (currently the Institute of Archaeology and Ethnology of the Polish Academy of Sciences), including the Head of the Department of History of Material Culture of the Middle Ages and the Modernity of the Institute of History of Material Culture Janusz Sztetyło, PhD. It was on their invitation that, in October 1989, I delivered a paper on traditional woodworking methods at the Department, presenting the most attractive objects from the collection. Another major attempt at taking advantage of such hobbyist's interest in an academic manner can be found in the research into the 16<sup>th</sup>-century extension of the Royal Castle in Warsaw, which apart from other things, yielded papers on the court circles of servicemen and craftsmen, workshops and works of Sebastian Tauerbach and Jurek Szwarz, court carpenters of the Kings: Sigismund I and Sigismund Augustus, enjoying royal burgher's privilege.<sup>13</sup>

There were several sources of acquiring tools for the collection. What proved with time to have been the most important one were so-called flea markets, particularly the Warsaw ones operating from the 1970s at various locations: the Mariensztat Market, the Wrzeciono Market by the Warsaw Steelworks, at today's Museum of Sports in the Żoliborz District, and since the later 1980s in Obozowa Street in Koło. There have also been some other markets frequented occasionally: in Cracow, Poznań, Gdańsk, and others. The other source were obviously carpenters and their workshops, often being closed down, especially within

Warsaw, but also Olsztyn and the Olsztyn Voivodeship. Visits to provincial carpenter's workshops, sometimes yielding some buys, was a must during our family bike rallies along the Baltic Coast and across Kashubia, Warmia and Mazuria, the Suwałki Region, Mazovia, the Zamość Region, Lower Silesia, the Polish Jurassic Highland, the Beskidy Mountains, and the Sub-Tatras. Another source of no less significance were the gifts from friends and acquaintances aware of my interests, and appreciative of them. When acquiring a new tool, I would always try to gain some information on its place of origin, users, and possibly other circumstances.

There were more criteria of the selection of the collected tools than sources. Initially, they were merely intuitional, and with the growing collection and deepening of the knowledge of tools, they gradually became more definite and conscious. An important, in some cases inhibiting criterion, was an exorbitant purchase price: in this way I missed several items. The remaining ones forming the hard to order hierarchy are as follows: the place where it was created and where the tool was used (Poland or a place abroad; close or further afield, region, locality), state of preservation (completeness, degree of wear and tear and degradation owing to wood-destroying pests), estimated time of its creation, its use (big industry or a small workshop), level of technical advancement and aesthetics of production, tool's frequency of occurring in the market, presence of manufacturer's and owner's signs, customized shape or working, manufacturer's prestige.

Following the purchase of an item, I would carefully inspect the object and submit it to simple conservatory proceedings. In the case of wooden tools, this would entail the following in the given order: cleaning off the layer of dust and dirt with a piece of cloth dampened with tepid water with some detergent, leaving permanent discolouration and so-called working layers (mainly carpenter's glue, different wood stains, burns); drying in room temperature; delicate use of fine grit sandpaper (800) to remove raised wood hairs; oiling with natural linseed oil on the whole surface, and after it has been absorbed, waxing with beeswax and polishing with a soft cloth. I cleaned steel and iron elements with metal wool, a brush and rust removers; I used polish paste for brass elements. I would glue larger cracks and breakages, and sometime also refilled them (with wood inserts) with the use of vikol-type wood glue. When a tool was incomplete, e.g. a plane was lacking the blade (so-called iron) or the wedge, I would try to adapt the element (of the same type and shape) from a different tool, this being quite a common practice in woodworking. I would make the wedge in the shape resembling that of the missing one, using the same wood as the plane's body, most frequently hornbeam wood, less often beech wood or ash. Identification of signs on the tools' body and blade allowed in a number of instances to identify their producers or users (particularly English and German). The documenting work was finalized with assigning a catalogue number to the tool and with a description on catalogue card (over the last two years digitized) in compliance with the assumed pattern (see below), following which endless cleaning works began: dusting whose arduousness was compensated for by the collector's joy from a physical contact with an identified and conserved object. The majority of the collection was always



5. Fragment of the home display of woodworking tools

displayed in bookcases and on shelves in the flat where it competed with books for space.

Currently the collection amounts to over 400 items. Its core is made up of the set of over 260 planes of different type and usage: machining tools of identity and emblematic quality to the woodworking community. All the items, identified as for function and name as far as it was possible, and also origin (manufacturer, production place and time), have been catalogued, assigned respective catalogue number, and described, resorting to literature on the subject and specialized online portals.<sup>14</sup>

The catalogue layout with the division of tools' categories and types (marked with different catalogue numbers) together with their names and the current number of pieces is presented in its Polish version below. Since the Polish names in craftsmen's practice were for long substituted with 'nativized' German (*hebel*, *rabanek*, *canubel*, *dybel*, *mazer*, *nut*, *szyrank*, *sztamajza*, *laubzega*, *winkiel*, *raszpla*, *knypel*, *bor*), and the tools' formal Polish names did not get fully rooted, the latter derived from literature are accompanied by their German equivalents in brackets and in italic, followed by English in square brackets;<sup>15</sup> interestingly, English and American tools often do not have continental equivalents, so these are left in English only.

## Catalogue

### 01. Bench planes for levelling flat surfaces: 108 pieces

- 01.01 – Zdzieraki (*Schrobhobel*) [scrub planes]: 7 pieces
- 01.02 – Równiaki (*Schlichthobel*) [jack planes]: 10 pieces
- 01.03 – Gładziki (*Dubelthobel*) [smoothing planes]: 24 pieces
- 01.04 – Spusty (*Rauhbank*) [fore planes]: 15 pieces
- 01.05 – Spajacze (*Fugebank*; *Zweimanhobel*) [panel planes]: 2 pieces
- 01.06 – Drapak/Zębaki (*Zahnhobel*) [toothed planes]: 4 pieces
- 01.07 – Kątniki (*Simshobel*) [rabbet planes]: 13 pieces
- 01.08 – Wręgowniki/kątniki felcowe (*Falzshobel*);



6. Dutch-style circular plane for planing concave surfaces, Poland, Pomerania, 1<sup>st</sup> half of the 20<sup>th</sup> c.; craft product, hornbeam wood, sole covered with sheet metal; adapted iron, replaced wedge; front handle resembling a reduced scroll; sides of the rear part of the body strongly beveled for the right hand; traces of the geometry of the wedge opening marked with a metal stylus

- nastawne (*Stellfalzhobel*) [moving filister planes]: 14 pieces
- 01.09 – Kątniki czołowe (*Eckensimshobel*) [bullnoses]: 2 pieces
  - 01.10 – Kątniki odsadzkowe (*Wangenhobel*) [cartwright's rabbet planes]: 3 pieces
  - 01.11 – Płytniki/kątniki platkowe (*Plattbankhobel*) [panel raising planes]: 8 pieces
  - 01.12 – Others: e.g. (*Kitfalzheble*) [sash planes]: 6 pieces
- 02. Planes for working curved surfaces and moulds: 71 pieces**
- 02.01 – Krzywaki (*Schiffhubel*) [circular planes]: 8 pieces
  - 02.02 – Kręgałta (*Rundhobel*), [round planes]: 3 pieces
  - 02.03 – Strugi profilowe/karnesowe (*Gesimshobel, Karnieshobel*) [bead-plane]: 41 pieces
  - 02.04 – Wałkowce/półwałkowce (*Stabhobel*) [side bead planes]: 5 pieces
  - 02.05 – Żłobkowce (*Hohlkehelhobel*) [grooving planes]: 13 pieces
  - 02.06 – Others: 1 piece
- 03. Planes for making joints: 67 pieces**
- 03.01 – Wpustniki (*Nuthhobel, Abgefalzterhobel/Ausgründehobel*) [plow planes]: 28 pieces
  - 03.02 – Wypustniki (*Federhubel*) [tongue planes]: 5 pieces
  - 03.03 – Zasuwniki/płetwiaki (*Grathobel*) [dovetail planes], nastawne (*Stellgrathobel*) [adjustable]: 14 pieces
  - 03.04 – Wyzłabiacze/wybiorniki (*Grundhubel*) [grooving planes]: 20 pieces
  - 03.05 – others
- 04. Combination planes**
- 05. Scraping planes: 15 pieces**
- 05.01 – Scraper planes and special wheelwrights planes to spokes: 9 pieces
  - 05.02 – Coopers planes (*Gargelkamm*) and other, half-finished products: 6 pieces
- 06. Tools for sawing and shaping wood: 49 pieces**
- 06.01 – Piły ramowe: kładowe (*Klopsage*), krawężnice (*Owrtersage*), czopnice (*Schliessage*), odsadnice (*Absatzsage*), krzywice (*Schweissage*), włosieniowe (*Laubsage*) [Frame saws generally unused in England]: 2 pieces
  - 06.02 – Piły ręczne – płatnice, grzbietnice, otwornice (*Fuchsschwanz, Rückensäge; Stichsäge*) i ich rękojeści [Hand saws (crosscut saws, tenon and dovetail saws) and their handles]: 8 pieces
  - 06.03 – Świdry wiertarki, korby, przedwiertniki (*Drillbohrer*) [Gimlets and drills]: 19 pieces
  - 06.04 – Piły narznicze: zasuwnice (*Gratsage*), piły odsadzkowe (*Nutsage*) [Dovetail saws]: 13 pieces
  - 06.05 – Pilniki i raszple (*Feilen, Raspeln*) [Files and rasps]
  - 06.06 – Dłuta (*Stemmeisen*) [Chisels]: 7 pieces
  - 06.07 – Others
- 07. Tools for measuring and marking wood: 69 pieces**
- 07.01 – Znaczniki (*Streichmass*) [Gauges]: 30 pieces
  - 07.02 – Przymiary [Rulers]: 5 pieces
  - 07.03 – Liniaty [Angling fences]
  - 07.04 – Węgielnice zwykłe, ruchome, uciosowe i inne (*Winkelmass, Schraegmass, Schmiege, Gehrmass*) [T-squares]: 21 pieces
  - 07.05 – Cyrkle [Callipers]: 8 pieces
  - 07.06 – Inne (poziomice, mierniki, ołówki) [Others (levels, gauges, pencils)]: 5 pieces
- 08. Devices for gluing: 15 pieces**
- 08.01 – Ściski (*Schraubzwingen*) [C-clamps]: 15 pieces
  - 08.02 – Ściski rozsuwane (*Schraubknecht*) [Bench vices]
  - 08.03 – Prasy [Presses]
  - 08.04 – Others
- 09. Auxiliary tools: 17 pieces**
- 09.01 – Siekierki/toporki (*Tischlerbeil*) [Axes/hatches]
  - 09.02 – Pobjijaki/knyple (*Klöpfel*) [Mallets]: 3 pieces
  - 09.03 – Młotki (*Hammer*) [Hammers]: 5 pieces
  - 09.04 – Obcęgi [Pincers]: 1 pair
  - 09.05 – Cykliny (*Ziehklinge*) [Scrapers]
  - 09.06 – Tygle do kleju (*Leimtiegel*) [Glue pots]
  - 09.07 – Narzynki i gwintowniki do drewnianych śrub i nakrętek (*Schneidzeug*) [Dies and taps for wooden screws and nuts]: 2 pieces
  - 09.08 – Others: 6 pieces
- 10. Tools' accessories: 14 pieces**
- 10.01 – Żelazka (*Hobeisen*) [Irons], wiertła (*Bohrer*) [drills]: 14
- I am intending to extend this collection created in



01.01.01	numer w kolekcji		komentarze
	<b>nazwa narzędzia</b>	Strug zdzierak, <i>Schrobhobel</i> ,	
	<b>miejsce i czas zakupu</b>	Warszawa - Pchli Targ na Kole Ok. 2000 r.	
	<b>wymiary i materiał</b>	216x51x60 mm. Drewno grabowe	
	<b>oznaczenia na korpusie</b>	Górna powierzchnia oprawy przed noskiem: w półokrąg: „JOH WEISS dwugłowy orzeł w koronie SOHN WIEN”; w środku poziomo: ścisk z motylkiem Na czole: w ramce: „K.K.OEST...KGL.LUNG.” poniżej: „PATENT”, poniżej: No 42073 ... No 48559	
	<b>czas powstania</b>	Przed 1918.	
	<b>producent</b>	Austria, Johan Weiss und Sohn, Wiedeń, 1820 – 1945;	
	<b>żelazo - wymiary</b>	190x36x4-3 mm, ostrze zakończone półokrągło Odchylak: 100x36x2 mm., półokrągły, mocowanie i regulacja na śrubie (patent Weissa)	
	<b>żelazo - materiał</b>	Odelew stalowy	
	<b>żelazo - oznaczenia</b>	W okrąg: „D. FLIR V. WERTHEIM WIEN”; w środku orzeł dwugłowy na odwrociu: „U”	
	<b>żelazo - producent</b>	Austria, Franz Wertheim (Anton Fanta, Desider Flir), Wiedeń und Scheibbs	
	<b>uwagi ogólne</b>	B. wysoka jakość wykonania; brak śladów użytkowania; pięta z wypukłym odbojem; czole głęboko fazowane pod rękę, szpara klinowa zamknięta prostopadłe, duży klin z odbojem	

7. Smoothing plane: exemplary catalogue documentation of one of the exhibits



8. Adjustable tongue plane used for working tongue-and-groove connections (e.g. floor planks), Poland, Podlasie Region, 2<sup>nd</sup> half of the 19<sup>th</sup> c. (?); craft joiner's and smith's product, hornbeam wood; horizontal fence with a rare steel adjustment mechanism on screws piercing the stock and the horizontal fence, with butterfly nuts on one side, and wood-covered handles on the other; the tool could be used by two people facing each other; dubbed zweimanhobel in joiner's jargon



9. German-style smoothing plane, dubbed bismarck, used for the final touch on wooden surface, Sweden, 1st half of the 20<sup>th</sup> c.; craft product, hornbeam wood; double irons manufactured by Erik Anton Berg, Eskilstuna, Sweden; meticulous manual working, massive ergonomic handle, dicing

1982–2020, although the conditions for searching in the pandemic are quite restricted. The oldest of my pieces date back, as far as I can assume, to the late 18<sup>th</sup> century, the most recent ones come from the 1970s. The collection thus covers the period of almost 200 years of deep transformations shaping the contemporary reality, meaning that in the

social and production realm that interests us it reaches the guild and workshop output, customized and limiting the production, going through mass production in the second half of the 19<sup>th</sup> and in the 20<sup>th</sup> century, up to contemporary and future post-industrial production of the 21<sup>st</sup> century, not so much of tools, as power tools and computer programmed



10. 'Coffin-style' smoothing plane used for final woodworking on short surfaces, England, early 20<sup>th</sup> c.; factory product manufactured by William Green-slade and Co, Bristol, hornbeam wood; double irons by unidentified manufacturer; owner's mark on the front, beveled edges



12. Adjustable plough plane used to make grooves in planks for tongue-and-groove connection, Austria, 1918–1945; factory product manufactured by Jo-hann Weiss und Sohn, Vienna, hornbeam wood, adapted iron, replaced wedge, 'continental' type; horizontal fence stabilized on wooden screws with rotund turned nuts and flat counter nuts, wooden groove-depth fence, adjustment on steel screws with brass nuts



11. Grooving plane used for removing material from grooves to a given depth between two parallel incisions in tops (of e.g. chests of drawers), Germany (?), turn of the 20<sup>th</sup> c.; factory product, unidentified manufacturer, pear tree wood (?); stock machine-cut with horizontal bandsaw; screw holding the iron with damaged steel butterfly nut; Polish craft product, adapted iron



13. Adjustable plough plane to make grooves along planks for tongue-and-groove connection, England, turn of the 20<sup>th</sup> c.; unidentified manufacturer, London, hornbeam wood, brass fittings, massive ornamentally beveled horizontal fence combined with spacer arms and stabilized with wedges; steel vertical fence (grooving depth) adjusted with a screw with a butterfly; illegible trademark and ownership mark stamped on the stock front

machines.

The advancement of the industrial revolution is revealed in the collection in the co-occurrence and quantity-relations between the two basic tool types: workshop- and factory-produced. The major criterion for the classification into one of the two groups is the way in which it was manufactured: either in an industrial manner with the use of chainsaws, milling machines, and lathes, or manually with planes, saws, and chisels. As a result, standardization of mechanized machining and individualized effect of manual working can be

seen. The percentage of the two kinds of tools in the collection can be assessed at 60% of the factory-produced ones versus ca 40% of workshop-produced. The ratio surprises, since it is almost balanced, this testifying to a relative saturation of the Polish market with industrial products, mainly foreign (predominantly German and Austrian; on the latter, see below). The fact allows to assume that in Poland not only in the 19<sup>th</sup> century, but also in the 20<sup>th</sup> (particularly in the first half), it was still relatively easier to either make the tool yourself, or to have it made in a nearby workshop, than





14. Fore plane for working long surfaces, Sweden, early 20<sup>th</sup> century; craft product, pear tree wood (?) and hornbeam wood; double irons manufactured by Erik Anton Berg, Eskilstuna, Sweden; slight wear and tear; historicizing ornamentally incised and closed handle leaning to the front, beveled edges



15. Die used for threading wooden screws, Poland. Wrocław, 1850; craft product, J.E. Firll; in the opening a model screw with a turned handle: tool used for making screws for vices on woodworker's benches and various handscrews as well as presses; steel screw taps were used to make the tapped hole, matching the die's diameter and thread pitch

to buy it ready-made in a shop.<sup>16</sup>

It is the statistics of the territorial-state origin of the tools amassed in the collection that correspond with the data related to the production form of woodworking tools. As it turns out, not fully 50% of the tools come from Poland, namely the territory within the country's today's borders (together with Silesia, Pomerania, Warmia, and Mazuria), which inevitably overstates the statistic.<sup>17</sup> Almost 30% of the collection (and possibly more because of the substantial part of unidentified objects) are tools of German origin; ca 10% account for Austrian and English ones respectively; while French and American tools constitute ca 3% each; single remaining ones come from Lithuania, Ukraine, Russia, the Netherlands, Belgium, and Spain.<sup>18</sup>

The wide territorial range of the collected tools (mainly planes) has allowed to observe the issue of the regionalization of shapes, stylistics, functions, and materials of which they are made. The deepest and most visible division is that into continental Europe versus Great Britain and the USA. It is revealed as if two-fold: continental tools, particularly in Central and Northern Europe used to be and continue to be made mainly of hornbeam wood (historically also of pear tree wood and other fruit trees; in France and on the Iberian Peninsula also of beech wood), whereas in Great Britain they were made almost exclusively of the local variety of hard beech tree. In the second half of the 19<sup>th</sup> century, due to the American Stanley Rule and Level Company metal planes became popular in the USA and England, supplanting almost entirely wooden flat surface and partially moulding planes, the latter thanks to so-called combination planes and milling machines.<sup>19</sup>

European wooden planes traditionally differ in shape. Roughly speaking, four types-styles can be distinguished. The most widespread one is the German type used in Central, Eastern, and Northern Europe, Poland included, whose characteristic feature is a rectangular plan (parallel sides) of the body and inserted in it moulded crooked so-called nose: a handgrip on the front part of the plane and an indent in the body in the form of a ledge serving as support for the left hand gripping the 'nose'. The rear of the stock features strongly bevelled edges: the upper and

side ones; also sometimes a semicircular is inserted at the back under a sticking iron, this facilitating the pushing of the plane with the right hand. This type, applied already in the Middle Ages, is ironically dubbed 'Bismarck' by English carpenters, possibly in reaction to the appearance of cheap German tools in the market by the late 19<sup>th</sup> century. The Dutch (Netherlandish) type, which may have served as the prototype for the German plane, has the front part of the body formed as a diagonal conical handgrip concluded with a more or less decorative volute (in the German version replaced with the glued in 'nose-cone'), while the rear raised part of the body is egg-shaped. The French-Iberian type forms a regular cuboid, featuring neither handgrips nor egg-shaping. Finally, there is the classical English plane called a 'coffin': having no nose, but a straight front and a heel like the French ones, however with egg-shaped lateral sides, making the projection of the tool resemble a boat, or, as the English claim, precisely a coffin (the latter not really surprising, since coffins were objects most frequently produced by carpenters). Metal and wooden English planes (particularly the longer ones) have as a rule an open handle: adjusted to a hand, slightly crooked and inclined forward towards an oval handle with the upper edge widening towards the back resistance for the top of the pushing hand); meanwhile, long continental planes (fore planes) usually have closed handles: broad with oval cut-outs for four fingers, and are, as a rule, less ergonomic than the English ones.

The juxtaposition of regional origin with the form of tool manufacturing leads to the next conclusion on the practical lack of Polish factory-produced tools in the Polish market. In the collection of items from the territory of Poland of today (200 pieces in total) what definitely dominates are craftsmen's products, with factory tools (imported in their vast majority) constituting about 25%. This is well reflected in the very number of companies from the Polish territories, of which only six have been identified: Gebröder Crotogino, from Lower Silesia (Świdnica), (operating in 1888–1891); J. Chełmickowski (Poznań, 1908–1919); Alfons Klawe (Częstochowa, 1906–1946, possibly one of the larger companies in the inter-war period); and Richard Standfuss's company (Wrocław, until 1945); in Communist Poland it was

the 'Drezdenko' Work Cooperative (Drezdenko); and 'Stallex', a private company-workshop (Piastów n. Warsaw).<sup>20</sup>

The most numerous imports of German tools in the collection (ca 110 pieces) are all mass-produced elements, and half of the manufacturers have been identified as follows: Caspar Böstelli/Georg Baldauf, Stuttgart and Neckarsulm, founded in 1842; August Krum, Johan Krum sohn GmbH & Co., Remsscheid, from 1892; Edward Geobel, Leipzig, 1851–1933; Friedrich Ott, Ochenfurt, from 1898. From among all the collected tools the ones manufactured by Otto Mecke, Berlin, 1872 – before 1930, strike with almost perfect quality. In total, 23 manufacturers have been identified, the majority of them based in North Rhine-Westphalia (the Ruhr Regions), Baden-Württemberg, and Berlin. No tools in the collection have been identified as coming from the Hamburg centre, of major importance in the 19<sup>th</sup> century.<sup>21</sup>

Austrian imports are almost exclusively factory products (36 pieces), and interestingly, they are practically manufactured by one prestigious Johann Weiss & Sohn Company from Vienna, operating in 1820–1945. In the category of woodworking tools (particularly planes) its products in Central Europe were as popular and as esteemed as those of the Austrian Thonet Company (bentwood furniture). Their high-quality tools, particularly adjustable planes of various functions, can still be found in many workshops in southern Poland, but also in Mazovia, Warmia, and even Sweden.<sup>22</sup>

English imports (45 tools, 24 companies, 16 identified) and American ones (9 pieces, 5 companies) are also factory-produced items. The majority of them are beechwood

moulding planes which come from the old industrial centre in Sheffield, London, and Birmingham. Most of the American tools are planes manufactured by Stanley Rule and Level Company from Connecticut, New England, among them wood-and-metal transitional planes being interesting.<sup>23</sup>

The scarce Swedish objects (5 items from the first half of the 20<sup>th</sup> century) stand out with high quality, meticulous craftsmanship, and exquisite blades, namely 'irons' made of 'Swedish steel' (products of the internationally awarded Erik Anton Berg Company, Eskilstuna, Sweden, 1880–1959). The question arises whether this craftsmen's-factory production scheme demonstrates the power of tradition, or is it already the post-modern model of sustainable production of the society able to harmonize different production traditions?

This is more or less all I can say about a collection of a historian. It seems that in the approach to the preserved cultural substance, so-called artefacts, modernity should display social appreciation of not only outstanding works, but if not of all, then of the majority of man-made ones. In this understanding tools, perceived more broadly as a method, a physical and intellectual component of the creative process should be finally freed from the socially archaic odium of work; equally with others, they should be considered historic monuments and institutionally preserved. Their today's position in the museum hierarchy: between an ethnographic object, and purgatory, namely the collectors' place, cannot secure their survival [the emphasis on the terms that are academic ones in the literature on the subject].

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**Abstract:** The paper focuses on a private collection of woodworking tools created in Warsaw in 1982–2020, covering over 400 items, mainly Polish, but also German, Austrian, English, French, and American. It presents the genesis of the collection, methods of its development, internal structure, and the collection study modes.

The presentation is accompanied by comments dealing

with the importance of a collection of tools, or more broadly of items not widely considered to be socially prestigious, seen against the phenomenon of collecting perceived as an element of 'luxury conspicuous consumption', as well as by the first attempts at comparing collecting realities and the position of woodworking tools in the hierarchy of museum objects in Poland and European countries.

**Keywords:** history, society, work, museum, collection, woodworking, tools, plane.

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### Endnotes

- <sup>1</sup> J. Tuwim, *Stół* [Table, here English transl. M. Iwińska], in: *Wiersze dla dzieci* [Poems for Children], O. Siemaszko (illustrations), 1<sup>st</sup> Edition, Nasza Księgarnia, Warszawa 1954. It is hard to assume that the poet knew the statutes of the Cracow Joiners' Guild from 1547 who defined the range of their output monopoly justly as all sorts of *work pasting* wood. It is worth recalling here that text to confirm the importance of paste and gluing in the craft, as well as Tuwim's erudition and educational credibility, see.: *Prawa, przywileje i statuta miasta Krakowa (1507-1795)* [Rights, Privileges, and Statutes of the City of Cracow (1507-1795)], F. Piekosiński (collected and published), Vol. 1, Kraków 1895, p. 532 ff.
- <sup>2</sup> T. Veblen, *Teoria klasy próżniaczej* [Theory of the Leisure Class], J. and K. Zagórski (Polish translation), J. Górski (preface and ed.), *Biblioteka Socjologiczna PWN*, Warszawa 1971.
- <sup>3</sup> The question is signalled e.g. in Krzysztof Pomian's remarks on the genesis of Old-Roman collections as originally spoils of war: testimony to the victorious power, imperiousness, and wealth, this implying the *superior disdain of the usefulness of the amassed objects*, as well as contemporary financial criteria of a collection's assessment. *We treat collectors seriously only when the sums they can afford seem substantial. Only a collection that is money investment, hidden in a bank's cellar, more precious than its weight in gold, inspires enchantment and respect. Without this, collecting is perceived merely as a narcissistic child's play, entertainment, a trifle.*
- <sup>4</sup> Pomian, *Zbieracze i osobliwości. Paryż, Wenecja XVI-XVII wiek* [Collectors and Curiosities. Paris, Venice 16<sup>th</sup>-17<sup>th</sup> Century], A. Pieńkos (Polish trans.), PIW, Warszawa 1996, pp. 7, 25, *passim*; also see the entry 'Collection', in: *Słownik Encyklopedyczny Muzeologii* [Key Concepts of Museology], A. Desvallées, F. Mairesse (ed.), D. Folga-Januszewska (academic ed. of Polish edition), Warszawa 2020, pp. 190-210.
- <sup>5</sup> J. Moxon, *Mechanick Exercises or the Doctrine of Handy Works*, Londyn 1677, 1693, 1703..., 2010; A. Roubo, *L'art. de Menuisier*, partie 1-4, Paris 1769-1775;

- J. Heurich, *Przewodnik dla stolarzy* [Guidebook to Woodworking], Warszawa 1862, (reprinted Infoksiążka, 2017).
- <sup>5</sup> See: D.A. Layton, *Let's Collect Old Woodworking Tools*, Jarold & Sons Ltd., Norwich 1977; Tools and Trades History Society, <https://taths.org.uk/about/aims>; [www.richarnold.co.uk](http://www.richarnold.co.uk); <https://www.holzwerken.de/museum/index.phtml>; <https://hobelaxt.wordpress.com>; <https://www.alte.beitel.de>; [www.supertool.com/index.htm](http://www.supertool.com/index.htm)
- <sup>6</sup> <https://hyvelbenk.wordpress.com/2015/04/25/Tools-from-skokloster-castle-in-sweden/>; J. Knutsson, B. Kylsberg, *Verktyg och verkstäder pa Skokloster slot, Utställningskatalog, Skokloster – studier utgivna av Skokloster slott*, nr. 19, *passim*.
- <sup>7</sup> *Słownik Encyklopedyczny Muzealnictwa...*, pp. 201-202.
- <sup>8</sup> K. Konsek, *Małe warsztaty i pracownie stolarskie pierwszych dziesięcioleci XX wieku: narzędzia i przyrządy* [Small Carpenters' Workshops and Studios of the First Decades of the 20<sup>th</sup> Century: Tools and Devices], 'Rocznik Muzeum Górnośląski Park Etnograficzny w Chorzowie' 2014, Vol. 2, pp. 232-234, see digital collection, [bazhum.muzhp.pl](http://bazhum.muzhp.pl)
- <sup>9</sup> It can only be presumed that the rich equipment of the Gdansk historic carpentry shops (partially possibly imported from the Netherlands, similarly as aesthetical patterns), *did not force its way through the sieve of time in the process of museum promotion*, to finally perish in the city's hecatomb in the spring of 1945. A slight trace of it, serving as a testimony to a para-collector's historical interest can be found in the notes by the Gdansk burgher Georg Schröder from the mid 17<sup>th</sup>-century illustrated with his drawings, and showing different woodworking tools that belonged to the workshop of 'Master John', see Georg Schröder, Tagenbuch, before 1668, Biblioteka Gdańska Polskiej Akademii Nauk, MS, Cat. No. MS 673, k. 65v-66; M. Bogucka, *Z zagadnień techniki rzemiosła w Gdańsku XVII w.* [Craftsmanship Technique in 17<sup>th</sup>-century Gdansk], 'Studia i Materiały do Historii Rzemiosła i Przemysłu' 1964, Vol. 20, pp. 31-52. In the Stockholm Maritime Museum (Vasamuset) the story of the unique 17<sup>th</sup>-century galleon is exquisitely completed with the display of craftsmen's tools involved in its building, including a variety of woodworking tools. A rich collection of 16<sup>th</sup>-century artefacts, including boatbuilding tools, can be viewed at the Mary Rose Museum in Portsmouth displaying the wreck of King Henry VIII's boat lifted from the sea bed in 1982.
- <sup>10</sup> *Rzemiosła 2.0* [Craftsmanship 2.0] Research Project, see <https://www.youtube.com>; presentation *Z czym do drewna* [What Do We Approach Wood With?], <https://etnomuzeum.eu/zbiory/strug-stolarski>
- <sup>11</sup> <https://www.drewno.pl/artykuly/2818-wystawa-starych-narzedzi-stolarskich-.html>
- <sup>12</sup> *Słownik Encyklopedyczny Muzeologii...*, p. 201.
- <sup>13</sup> M. Wrede, *Dwór Jagiellonów* [The Jagiellons' Court], in: 'Mówią Wieki' 1995, No. 9(436), pp. 22-26; idem, *Królewscy Stolarze. Ludzie i narzędzia w służbie Jagiellonów* [Royal Carpenters. People and Tools in the Service of the Jagiellons], 'Mówią Wieki' 1995, No. 11(438), pp. 29-33; idem, *Jurek Szwarz, nadworny stolarz Zygmunta Augusta i jego prace* [Jurek Szwarz, Court Carpenter of Sigismund Augustus and His Works], 'Rocznik Warszawski' 1993, Vol. XXIII, pp. 211-229.
- <sup>14</sup> J. Heurich, *Przewodnik dla stolarzy...*, and S. Schreiber, *Przewodnik Stolarski* [Woodworking Guide], Tarnów 1915 (numerous later and reprint 2005); F. Kuśmierski, *Kurs nauki stolarstwa. Podręcznik dla uczniów i nauczycieli szkół technicznych* [Woodworking Course. Manual for Students and Teachers at Technical Schools], Lwów-Warszawa-Kraków 1924 (1<sup>st</sup> Edition, 1908); *Cieśla, stolarz, dekarz: poradnik dla rzemieślników wiejskich* [Carpenter, Joiner, Roof-er: Guidebook for Rural Craftsmen][F. Piąński (ed.) based on the materials of Vocational Training Correspondence Courses of the Ministry of Building], Warszawa 1950; W. Prządka, *Technologia meblarstwa* [Technology of Cabinetmaking], Part I, Warszawa 1973; J. Tyszka, *Technologia stolarstwa* [Technology of Carpentry], 3<sup>rd</sup> Edition, revised, Warszawa 1983; I. Swaczyna, *Meble. Naprawa i odnawianie* [Furniture. Repair and Renovation], Warszawa 1995; *Prace w drewnie* [Woodworking], J. Graella et al. (ed.), A. Magnuszewski (Polish transl.), Warszawa 2010; P.C. Welsh, *Woodworking Tools 1600-1900*, Washington 1966, Contributions from the History and Technology, papers 51, pp. 177-227; G. Heine, *Das Werkzeug der Schreiners und Drechsers*, Hannover, 1990; *Wielka Encyklopedia Ilustrowana* [Grand Illustrated Encyclopaedia], published S. Sikorski, Warszawa 1890-1914, Vols. XXIX-XXX, Warszawa 1902, entry: 'Plane', pp. 525-527, figures; <https://www.gracesguide.co.uk/> portal Graces Guide to British Industrial History and others; also see: endnote 5.
- <sup>15</sup> *Słownik stolarski. Odbitka z „kursu stolarstwa” opracowanego przez Fr. Kuśmierskiego wydana z zapisu Władysława Peplowskiego...* [Dictionary of Woodworking. Copied from 'Carpentry Course' Elaborated by Fr. Kuśmierski published after Władysław Peplowski's Records...], Warszawa 1917.
- <sup>16</sup> The author's findings, in: K. Konsek, *Małe warsztaty i pracownie...* [Small Carpenters' Workshops and Studios...], p. 234 about the factory origin of a large part of the tools in carpentry workshops from Silesia, confirms the presumption that there is a large variation in the standards of carpentry equipment in Poland within today's borders. Undoubtedly, the Prussian and Austrian Partitions were the leaders in saturating the market with factory products.
- <sup>17</sup> If we were to assume the territory of Poland as in 1921, the result would likely be lower by 10-15%.
- <sup>18</sup> Almost all the foreign tools have been purchased in Poland: meaning, they were imported to Poland by their users, and subsequently bought by the Author, mainly in Warsaw.
- <sup>19</sup> <https://www.stanleyworks.pl/our-company>; <https://www.drewno.pl/artykuly10545,legenda.html>; <https://virginia-toolworks.com/tools/stanley-planes/>
- <sup>20</sup> See 'Kleines Werkzeugmuseum' Portal, endnote 5.
- <sup>21</sup> See G. Heine, *Hamburger Werkzeugmacher im 19*, Hamburg 1991. Quoted after: K. Konsek, *Małe warsztaty i pracownie...*, p. 235, who enumerates many other companies from the territory of today's Germany, also quoting relevant literature.
- <sup>22</sup> From among those enumerated by K. Konsek, *ibid.*..., other Austrian companies (see A. von Enger, *Oesterreichs Holz-Industrie und Holzhandel*, Wien 1907), the collection features only two planes manufactured by the Vienna-based Franz Wertheim Company.
- <sup>23</sup> See J. Rees, *Goodman's British Planemakers from 1700*, 4<sup>th</sup> edition, Lanham 2020, <https://taths.org.uk/about/aims>; Also see: R. A. Salaman, *Dictionary of Woodworking*, New Jersey 1977; here quoted in Polish after: K. Konsek, *Małe warsztaty i pracownie...*, p. 236.

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**Word count:** 5633; **Tables:** –; **Figures:** 15; **References:** 23

**Received:** 01.2021; **Reviewed:** 02.2021; **Accepted:** 02.2021; **Published:** 05.2021

**DOI:** 10.5604/01.3001.0014.8755

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**Competing interests:** Authors have declared that no competing interest exists.

**Cite this article as:** Wrede M.; TRADITIONAL WOODWORKING TOOLS. A HISTORIAN'S COLLECTION. *Muz.*, 2021(62): 41-52

**Table of contents 2021:** <https://muzealnictworocznik.com/issue/13664>