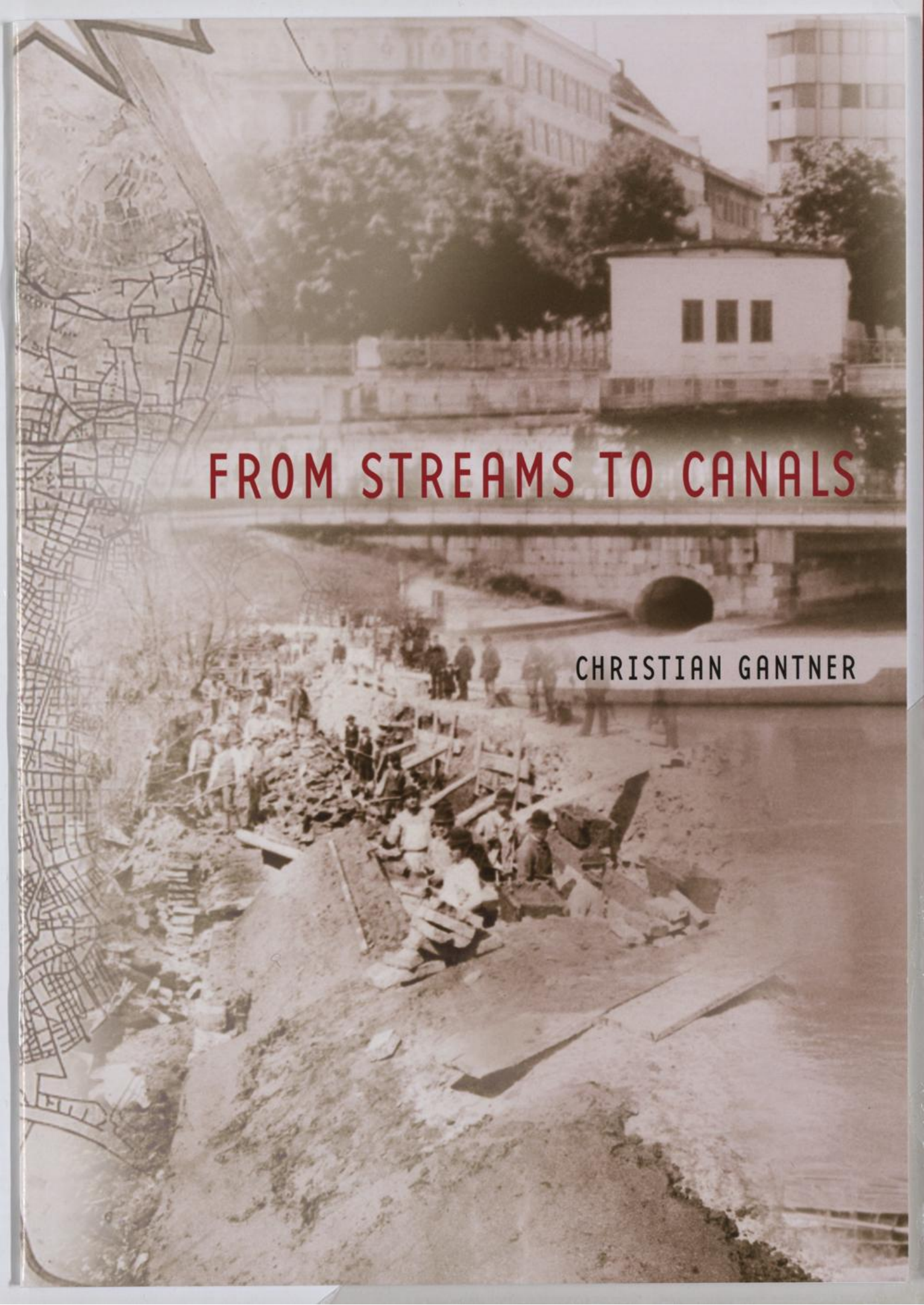




FROM STREAMS TO CANALS

CHRISTIAN GANTNER

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Charting the History
of Vienna's Canalised Streams

EDITED BY: CITY OF VIENNA / MUNICIPAL DEPT. 30
VIENNA WASTE WATER MANAGEMENT



PUBLISHING INFORMATION

Media owner, editor: City of Vienna / Municipal Dept. 30 –
Vienna Waste Water Management

Author: Christian Gantner

Credits: Christian Gantner, archive of Municipal Dept. 30, list of references

Concept / Graphics: Silvia Freudmann, Claudia Drechsler

Publisher: Bohmann Druck und Verlag Ges.m.b.H. & Co.KG., 1110 Vienna, Austria

Printed on ecological paper from the sample folder of "ÖkoKauf Wien".

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PREFACE

Chronicling the history of Vienna's brooks and streams, this publication traces the development over time of two former brooks from open watercourses to canalised streams. They were not selected arbitrarily, as these two brooks decisively marked and shaped the surrounding landscape for centuries.

One of them is the Als brook, whose meanders can still be gleaned in Vienna's street network more clearly than those of any other old watercourse. Or the Krottenbach, a stream cutting deep into the terrain and hence bisecting the village of Döbling into an upper and a lower part, which necessitated the construction of steep connecting flights of stairs. In fact, it is only through knowledge of this historic given that the names Oberdöbling and Unterdöbling ("Upper Döbling" and "Lower Döbling") become understandable.

These two watercourses moreover clearly illustrate the development of Vienna's canalisation and sewer system in the 19th century. While the lower course of the Als brook was part of the first municipal canalisation programme, which was developed between 1830 and 1834 and completed in 1850 (hence initiating the history of planned stream canalisation in the Biedermeier age), the Krottenbach in its turn stands for the second and final phase of stream canalisation, which extended from 1891 to the turn of the century and beyond.

Both are therefore symbols of an era and typical examples of a technological development push that laid the cornerstone for Vienna's rise to a metropolis around 1900.

The articles "Die Als – Die Geschichte eines Wasserlaufs" (The Als Brook – The History of a Watercourse) and "Am Krottenbach – Auf den Spuren einer historischen Landschaft" (Along the Krottenbach – On the Trail of a Historic Landscape), both part of the series "Vom Bach zum

Bachkanal", were first published in 1991 and 1997, respectively, both by Municipal Department 30 at its own initiative and as unaltered reprints supplementing the Wiener Geschichtsblätter series issued by Verein für Geschichte der Stadt Wien.

Both articles were abbreviated and are now available in an updated, revised and enlarged version including additional photographs and maps.

Thus the chapter on Vienna's vaulted-over brooks in the Krottenbach article was revised and now precedes the two sections on the historic streams by way of general introduction. By the same token, the chapter on the silting-up of a branch of the Danube from the Krottenbach article was transferred to the general section to ensure a clearer overview.

The former watercourses are reconstructed in the direction of their flow from source to debouchment while the course of housed-in streams is described, in keeping with the technique of canalisation, against the flow direction from the point of debouchment into the receiving water body to the end of the canal.

Smaller rivulets in the catchment areas of the two watercourses were likewise covered if considered interesting for the purposes of this text.

Except for those sections that merited more in-depth treatment, the present text reflects the layout of the historic watercourses in the years before being housed in.

The description of the construction works conducted to house in the brooks refers to the projects originally executed; later refurbishment measures were taken account of where justified.

Christian Gantner



Emperor Francis inspects the construction works of the "cholera canal" in 1831.
Lithograph by J. Trementsky

GENERAL SECTION

THE HOUSING-IN OF BROOKS ON VIENNA'S MUNICIPAL TERRITORY – A GENERAL OVERVIEW

Looking at a map of modern-day Vienna, it is almost impossible to imagine that brooks and streams, larger and smaller streamlets and rivulets used to flow through many lanes and streets of this city as late as in the Biedermeier period. All of these watercourses originated in the Vienna Woods, which to this day, belt-like, encircle the metropolis from north-west to south.

Old engravings and paintings of those times depict these watercourses, along whose banks gnarled silhouettes, giant trees of bygone eras were outstanding landmarks that invited strollers to stay awhile and relax.

But where have all the brooks and rivulets gone that used to dominate Vienna's geography and outlook for so many centuries and played such an essential role in determining the urbanistic development of the metropolis? Many of them have been forgotten while others are still recalled through street and place names (Alserbachstrasse, Krottenbachstrasse, Dornbach, etc.).

To this day, their depth contours and meanders can be traced through the urban area of the Austrian capital. Banished into the "underworld", these water suppliers of the past today contribute significantly towards comprehensive sewage disposal. Only the rivers Wien and Liesing – the two biggest watercourses to originate in the Vienna Woods – are still prominent in the modern cityscape; Wien River remains visible along several sections where it was not housed in.

Wastewater disposal engineers call such housed-in watercourses "canalised streams". Former brooks were covered and vaulted over; their spring water now serves to flush and drain blackwater and



Fig. 1, Map of Vienna in 1803

stormwater. Due to the dimensions of the vaulted-over canals and their low topographic position, they are a fixed element of Vienna's modern-day main collector network; their importance may be compared to that of the main traffic arteries crossing Vienna.

The idea of using brook water flowing into a city to flush its sewers and at the same time prevent flood catastrophes goes back to the engi-

neers of ancient Greece. The later sewer system of ancient Athens evolved from a vaulted-over brook called Eridanus, which crossed the old city centre north of the Acropolis.

The development of Rome, too, was significantly influenced by its canalised streams. The oldest Roman drainage structures were undoubtedly built by Etruscan engineers. In the 6th century B.C., Tarquin the Elder ordered the construction of a drainage system emptying into the Tiber to render the marshy river plain dry and useful for agriculture.

In the course of time, this drainage system was also used to dispose of human and animal excrement. The constant growth of the city entailed the construction of a growing number of sewers, most of which were connected to the existing receiving watercourse, so that this canalised stream gradually developed into the biggest Roman collector, the Cloaca Maxima. The system was 800 metres long, and, being 3.20 metres wide and 4 metres high, of respectable size even by current standards. However, the original development of this sewer was very similar to that of Athens.

Typically of canalised streams, an embankment was first created; then the watercourse was covered – at first partially, later in its entirety – parallel to the development of the city and used to dispose of water contaminated with waste and excrement.

This sewer construction technique was employed by the Romans throughout their empire wherever possible. The setting-up of the Roman military camp Vindobona launched the history of sewer construction and brook canalisation in what was to become Vienna.

The Roman commanders had chosen both a geographically and strategically favourable position for their camp. To the north-west, the Roman fort was delimited by today's Tiefer Graben, through which the brook Ottakringer Bach continued to flow far into the Middle Ages.

The former Salzgries branch of the Danube and the modern-day Graben formed the north-eastern and south-western boundaries of the

Roman camp. To the south-east, the fort was bordered by a narrow rivulet that originated in the lower third of the Graben and probably debouched into the Salzgries branch of the Danube somewhere along today's Rotgasse and Kramergasse.

Ottakringer Bach on the one hand and the abovementioned rivulet on the other hand split the camp into two drainage zones.

The effluents of the camp were fed into collectors, which transported waste and excrement via feeder canals into these two open watercourses and further into the old branch of the Danube. For example, a stretch of sewer with an internal width of 80 centimetres and an internal height of 1.80 metres running parallel to Tiefer Graben was found in the basement of the headquarters of Vienna's fire-fighting services situated in the square Am Hof.

Undoubtedly, the short rivulet originating from the Graben carried very little water; as a result, it is highly probable that this watercourse was covered and canalised, at least in part, already in those days. The fact that the size of the inhabited area remained stable after the destruction of Vindobona in the turmoil of the Migration Period until the first expansion brought about by the Babenbergs in the late 12th century also makes any change in the discharge situation seem improbable.

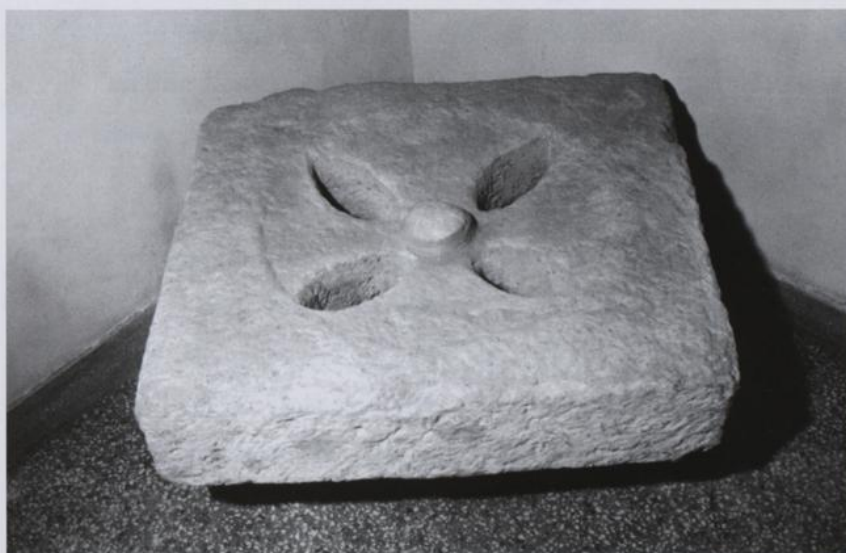


Fig. 2,
Roman manhole
cover of military
camp Vindobona



Fig. 3, Start of construction works for Right Wien River Collector, autumn 1831

While drainage technology had been all but forgotten with the decline of the Roman Empire, a few, sparse remnants of a sewer system can be dated back to the late Middle Ages. One of these artificial canals was the small rivulet described above, which probably dried up when the Graben was filled in during the medieval town expansion works and was excavated in the course of construction works for the U3 Underground line in front of the Haas House.

According to medieval records, some houses were connected to an artificial canal using the bed of this former brook. Was this only a canal following in the bed of the old watercourse or was the brook itself housed in to become the first canalised stream in Vienna's history? We do not know. However, it is an established fact that the original courses of brooks in and around Vienna were modified at a very early date, with Ottakringer Bach and Als as prime examples.

As described later in this text, the lower reaches of Ottakringer Bach were altered heavily. Starting around 1240, it thus no longer flowed through Tiefer Graben into what is today's Danube Canal but was diverted several times to ultimately debouch into Wien River. This has remained unchanged to this day. Invisible from the street level, the canalised stream debouches into the Left Wien River Collector near the Secession Building. Aficionados of the movie "The Third Man" are familiar with this location, as Municipal Department 30 – Vienna Wastewater Management has for years been delighting an interested public with guided tours through "underground" Vienna around Esperanto Park.

It is likewise an established fact that numerous canals existed towards the end of the 15th century in today's first municipal district. The intense construction activities after the end of the Second Turkish Siege in 1683 also entailed a denser canal and sewer network.

In the first third of the 18th century, the built-up area within the perimeter of the bastions had been almost comprehensively provided with sewers. The quickly developing suburbs and villages around the city discharged their wastewater into the brooks and watercourses along whose banks they had sprung up. Initially, the water regime was sufficient to absorb the waste and excrement volume. Yet increasing urban condensation demanded that spring areas be drained; in addition, spring water was tapped at the town limits and transported into the city as drinking and service water. Soon the dislodging force of the now scarce water was insufficient to carry the growing volume of excrement and waste along.

However, the annual floods triggered by the vast catchment area deep in the Vienna Woods were not banished by tapping the spring water in reservoirs situated within today's Gürtel boulevard. Mostly in spring-time, but in any case after every stormwater event, devastating and disastrous floods occurred with great frequency, releasing the accumulated, rotting waste, which often comprised animal carcasses. The plague epidemics of 1679 and 1713 were caused by such events.



Fig. 4, Vienna's sewer network, circa 1730

Although these sanitary shortcomings led to an alarming deterioration of public health, it needed another, even worse catastrophe – as described in the section “Die Als – Die Geschichte eines Wasserlaufs” – to tackle the project of systematic brook canalisation: the great ice thrust event of 28 February 1830 and the subsequent cholera epidemic.

This led to one of the biggest construction programmes in Vienna's history. It was to take more than 70 years; at its end, most existing brooks and watercourses were vaulted over and canalised either in their entirety or at least up to the boundaries of the Vienna Woods.

In addition to the construction of the Right and Left Wien River Collectors, the systematic canalisation of the contaminated watercourses was now undertaken. The lower reaches of Ottakringer Bach were vaulted over between 1837 and 1840, followed by the housing-in of Alsbach up to the Linienwall (a fortification line) from 1840 to 1845, as described below in greater detail. In 1848, Währinger Bach was canalised from its debouchment into the Als brook to today's Gürtel boulevard. The Schmidtgraben, a ditch in the Rossau area, was likewise covered. This first big canalisation push ended in 1850 with the housing-in of Döblinger Bach.

Fig. 5, Until 1892,

the old fortification line ("Linienwall") delimited Vienna from the outer suburbs



With the law of 19 December 1890, which provided for the incorporation of 33 suburbs as well as parts of another 19 municipalities situated at the urban periphery as per 1 January 1892, the municipal area of Vienna effectively tripled from 55.4 to 178.12 square kilometres. The number of inhabitants likewise grew by more than 60 percent to attain 1.342,897. The 11th to 19th municipal districts came into being, and extensive tasks on behalf of the community had to be addressed by the city administration.

The development of public transport and the street network as well as of the technical infrastructure had to take account of the needs of a constantly growing metropolis.

The imperial residence and Austro-Hungarian capital Vienna had embarked on the road into a new century. Structures were being demolished, modified or rebuilt from scratch all over the city.

Since the former suburbs were rarely willing to consider supralocal concerns in their planning activities, the traffic and transport network paid little attention to overarching needs; as a result, lanes e.g. continued only to the municipal limits of a community, where they were often cut off, leaving travellers literally "in the middle of nowhere".

While some suburbs were able to pay for infrastructure measures even before incorporation, many others could not afford this. This unacceptable state of affairs had to be eliminated by developing superordinate planning guidelines.

In connection with city expansion, an amendment to the Building Code came into force on 26 December 1890, thus obligating the City Council to make sure that this expansion would proceed comprehensively and uniformly.

The construction of the big collectors along Wien River outside the fortification lines and along Danube Canal was therefore an achievement of the Commission for Traffic Structures set up in 1892. A general regulation plan for Vienna now laid down urban planning guidelines.

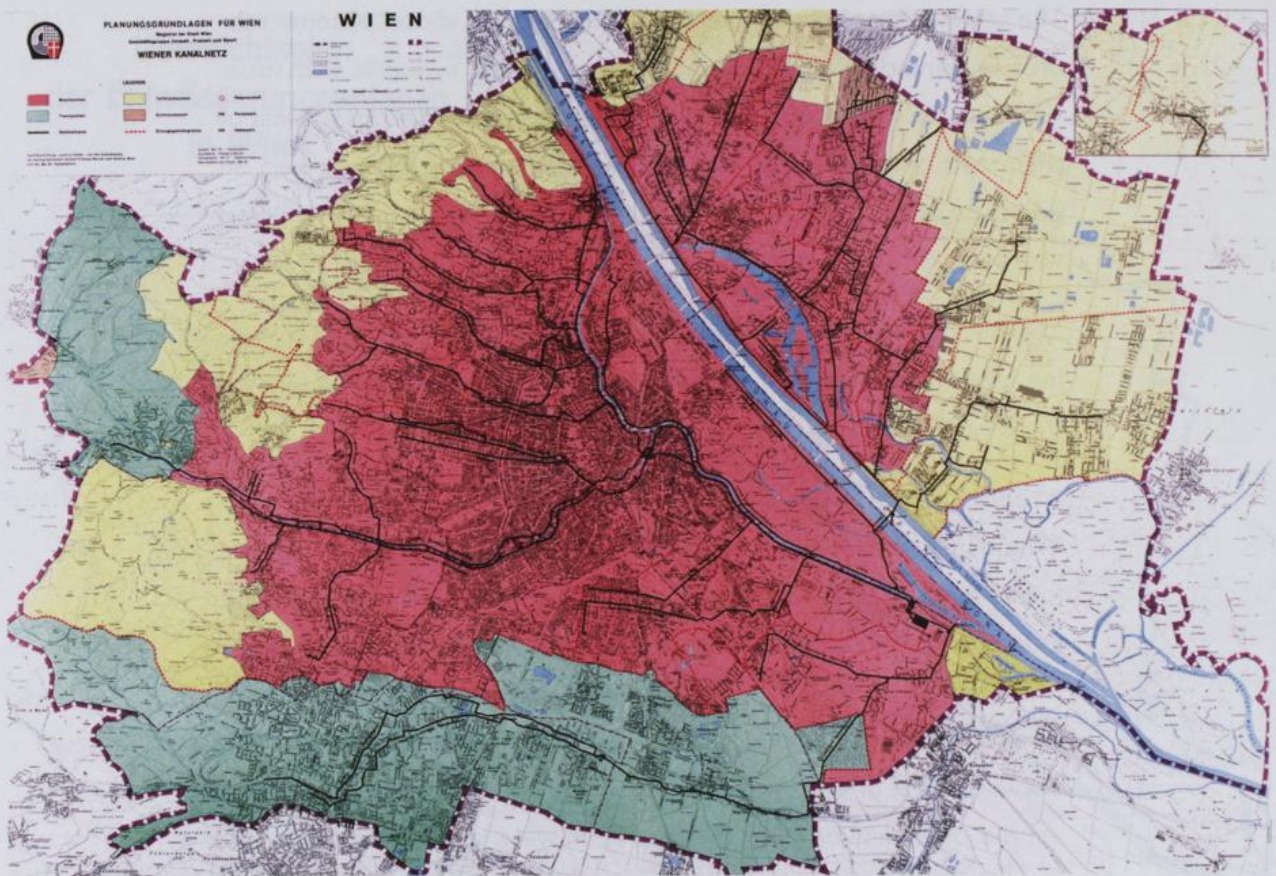


Fig. 6, Overview of the various wastewater disposal systems of Vienna. Approx. 80% of the city are served by a mixed system (stormwater and blackwater), mostly with canalised streams as main collectors on the right bank of the Danube (red)

In 1893, a building zone plan was likewise adopted. For the first time, this plan created a rough classification into residential and industrial zones while at the same time defining building classes, with a decreasing level of stringency of requirements from city centre towards the periphery.

Another priority lay in putting an end to the disastrous hygienic conditions in the suburbs, which had time and again triggered diseases and epidemics, by means of suitable measures. Above all, this called for the co-ordinated improvement of disposal and discharge structures, which was only possible with the co-operation of all municipalities involved.

The sewer sections already constructed in the "hot spots" of some suburbs presented divergent diameters and, due to hydraulic and structural defects, were unsuitable for efficient wastewater disposal. Most of them had only been built to combat odour propagation, lacked an adequate, wide enough bed and were often not even fully covered with soil.

The stocktaking of the technical condition of the old Nesselbach vaulting gives a clear picture of the status quo of these sewers taken over by the City of Vienna.

A report from the archives of MA 30 states:

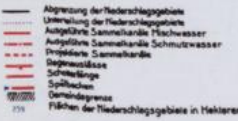
"The numerous sanitary shortcomings as well as traffic-related requirements already motivated Heiligenstadt, Nussdorf and Grinzing, then independent municipalities, to house in the open Nesselbach brook crossing their territory in accordance with the available funds and subsidies granted by the province, with the objective of ensuring the most viable removal of wastewater from built-up areas and moreover of creating a possibility of using the housed-in watercourse as a traffic surface. The brook was housed in between 1870 and 1888 without the benefit of a uniform project in piecemeal fashion, partly by the municipalities and partly by private actors, according to current needs. No permit under water law to vault over the watercourse was entered into the water register."

It is furthermore added that:

"The method of vaulting-over, which proceeded in piecemeal fashion, first in one spot, then in another, without interconnection, with different diameter sizes, different construction materials and different methods of bottom construction without account taken of an even head, explains why the entire structure is no longer able to meet contemporary requirements for a canalised stream suitable for wastewater disposal."

Since the individual sections were vaulted over without taking account of the water volumes to be disposed of and their runoff, the consequences of this type of building execution are now reflected in quite inadequate water management and extensive damage to the structure."

Year	Number of individuals
1900	1000
1920	2500
1940	3000
1960	1500
1980	1000
2000	500



The canalised streams discharging into the Wien River Collectors as well as to the north-west are clearly visible due to their meandering course

"The larger part of the vaulting also presents only minimal cover height; as a result, the vaulting is severely affected by vibrations caused by carriages passing above it and thus impaired in its cohesion."

If we bear in mind that the traffic volume in the former suburbs in those days was certainly much inferior to the present, the structural condition of the above-described sewer must have been alarming indeed.

While the middle of the century had been marked by the need of building an adequate suburban sewer network extending to the old fortification ring around Vienna (including the construction of the Left and Right Wien River Collectors, the housing-in of Ottakringer Bach, Alsbach and Währinger Bach), the city administration now chiefly addressed the wastewater disposal problems in the urban expansion areas.

The incorporation of the suburbs beyond the Gürtel triggered the second major canalisation programme of Vienna's municipal administration. A particularly important role was assigned to the vaulting-over of the severely contaminated brooks of the Vienna Woods beyond the outer fortification line. At the turn of the century, these watercourses still used to flow freely through predominantly rural communities, endowing Vienna's environs with their typical outlook.

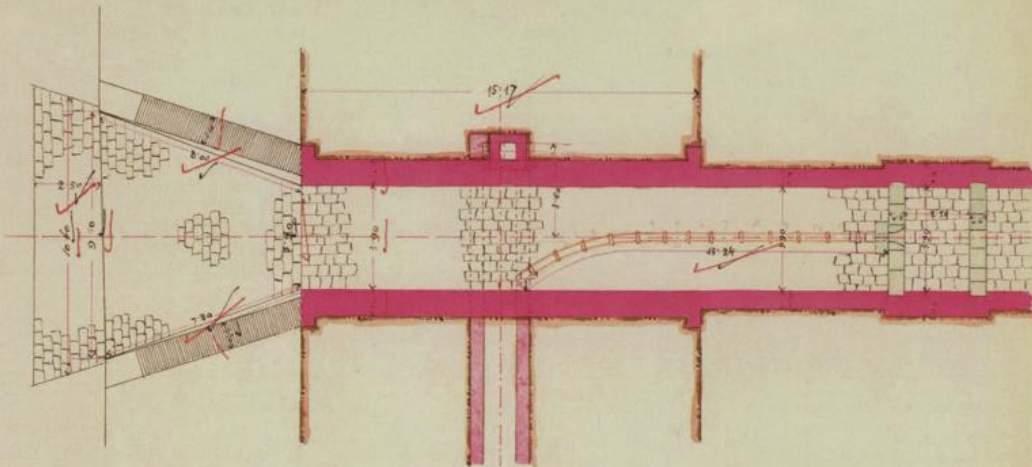
Between 1891 and 1903, the City of Vienna invested the amount of approx. 17 million crowns in the development of sewers and drainage structures in the former outer suburbs. Open streams were transformed into main collectors that remain efficient to this day.

Due to the rapid growth of the city that soon reached the foothills of the north-western Vienna Woods, the social and topographical structures began to change profoundly.

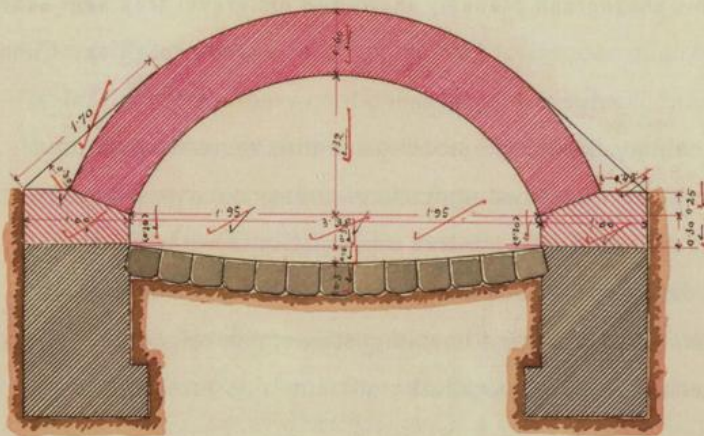
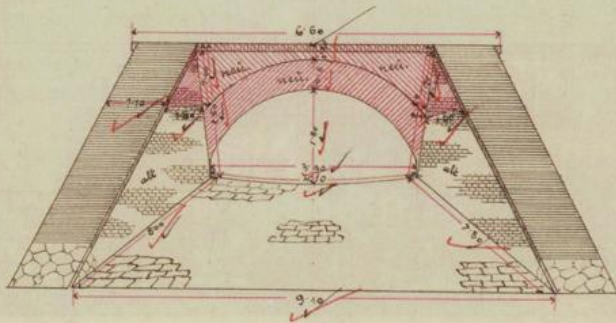
One of the watercourses that disappeared "underground" forever in those days is not only recalled by old site plans from the archives of Municipal Department 30 – Vienna Wastewater Management but also in the name given to the eponymous street in the 19th municipal district – the Krottenbach brook.

Like all still uncovered streams of those days, this brook was used as an open sewer, since the villages and settlements along its banks lacked the funds for constructing an efficient waste disposal canal.

Ameisbach.



Maßstab 1:200



Schnitt g h.

Maßstab 1:50

Fig. 8, Outlet structure and profile of the vaulted-over Ameisbach



Fig. 9, Last vestiges of Ottakringer Bach in Liebhartstal valley, circa 1930
(author's note: this photograph probably shows the old gravel trap near Schottenhof,
which ceased operation in 1910)

In the late 19th century, the individual village centres were still separated from each other by extensive agricultural areas; as a result, long stretches of the new canalised streams were often only used for transport purposes. This made it necessary to fine-tune the canal layout with the planned future use in order to avoid cost-intensive relocation – no easy task as plans were often modified.

In view of recurring problems with land purchases required for this project, the open-air construction works proceeded quite slowly and were fraught with numerous difficulties, although this venture was essential to provide the incorporated suburbs with proper sewerage.

A report by the then Office of Urban Construction on the urgent necessity, for reasons of hygiene, of continuing the vaulting-over of Krottenbach brook states as follows:

"Upstream of the canalised section, Krottenbach brook continues for a length of approx. 1,900 metres as an open watercourse passing through agricultural land; there exist no buildings either along its banks or in the environs.

For this reason, there would seem to be no need for housing in the brook bed, were it not for the two formerly independent municipalities Neustift am Wald and Salmannsdorf, which are situated hard by the brook and use the watercourse for drainage.

If only rainwater were introduced into the brook, which passes between the local buildings and was vaulted over very ineffectually in some points and transformed into a street gully in others, the conditions currently noticeable along the brook bed – highly alarming from the hygienic point of view – would not require a solution.

However, the Krottenbach brook bed is definitely used by these two communities as an open sewer that absorbs all wastewater, process water and great volumes of manure from stables as well as overspills from cesspools and manure pits.

This protracted use of the open brook to dispose of all types of wastewater has led to heavy contamination of the subsoil; due to the rotting organic substances thus introduced, the quality of the air is severely compromised during the warmer months. Naturally, this entails a higher incidence of epidemic diseases in these otherwise very favourably situated communities; the Municipal Health Office has therefore requested the earliest possible vaulting-over of Krottenbach brook as a result of the scarlet fever epidemic that broke out in the area this spring (note: in 1894).

To put an end to this unacceptable status quo, the City of Vienna is planning to vault over the currently still open brook section between Oberdöbling and the Sulzweg (translator's note: a path) in Salmanns-

dorf, so that houses in Salmannsdorf and Neustift can be provided with sewers and the waste material can be disposed of in a manner corresponding to the applicable hygienic standards. Due to the already executed works, priority is now given to the most urgent and obvious necessity of providing the most densely populated zone of Döbling with proper sewerage. The present project for the housing-in of Krottenbach brook was developed on the basis of the master project proposed at the hearing required under water law on 27 March 1893 and in full compliance with the sections already vaulted over ..."

This text offers a drastic and impressive picture of the hygienic conditions prevailing in the "good old days". However, this situation was to improve decisively over the coming years due to the fact that connection to the sewer system had become mandatory.

The report on existing water rights comments as follows:

"At the moment, the water of the Krottenbach section to be vaulted over is not used; neither have any water rights been entered into the water register. However, numerous manure runoffs are discharged into the brook bed without permit. According to Article 58 of the Building Code, the construction of a main sewer obligates building owners to establish house sewers, which must also absorb manure runoff, for which reason the existing discharges into Krottenbach brook will be abolished."

In addition to the hygienic advantages resulting from this large-scale sewer construction programme, the impulse generated for the construction business and its ancillary industries must not be overlooked.

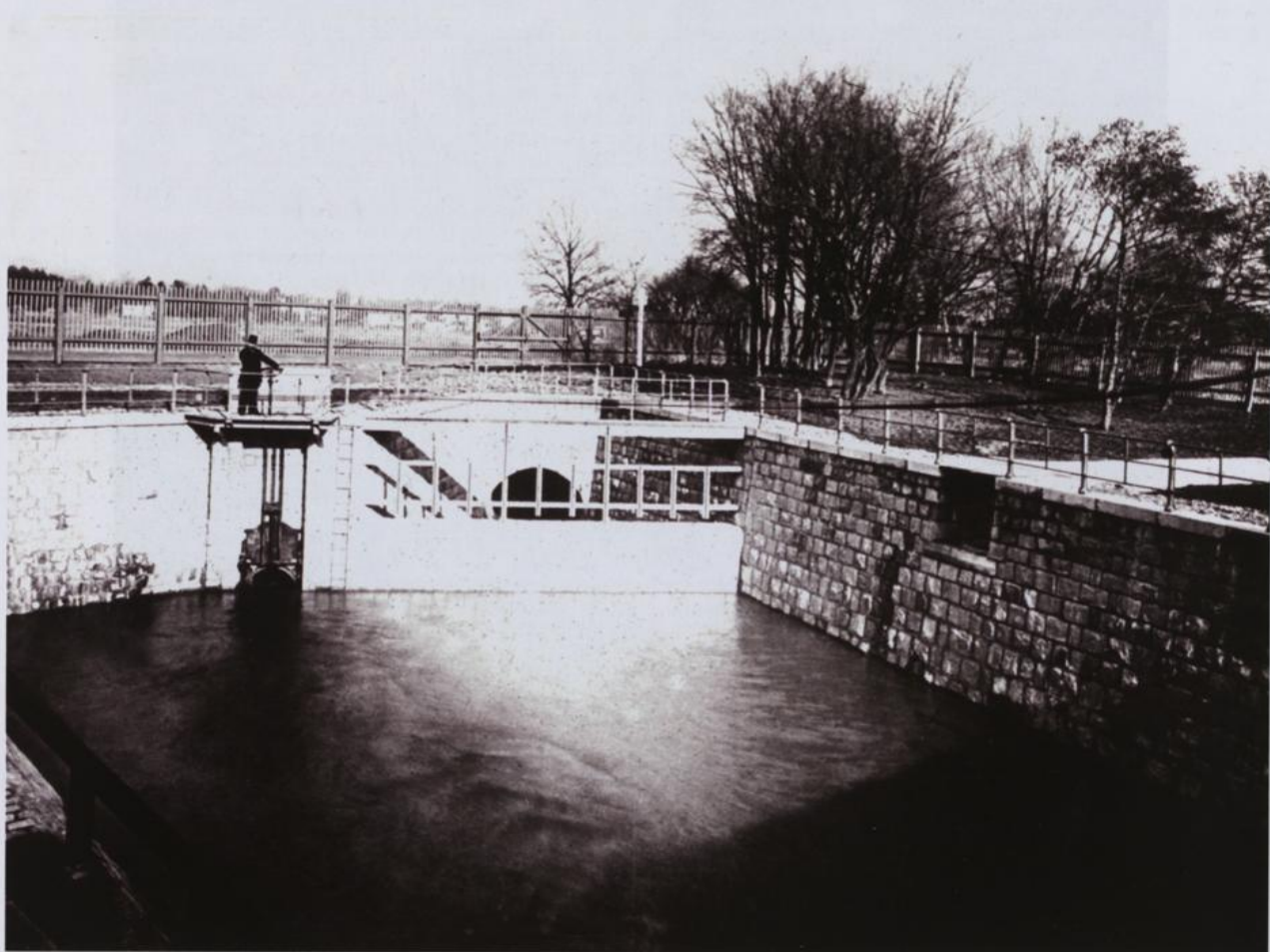
Over the 13 years specified above, other brooks vaulted over in addition to Krottenbach included Nesselbach, Arbesbach, Dornbach along Haltergraben valley and the still uncovered sections of Alsbach and Währinger Bach, all part of the catchment area of Danube Canal.

The housing-in of the lower reaches of Schreiberbach, which had already existed before incorporation and was several times updated in connection with the training of Danube Canal, was further continued.

Starting in 1890, construction works in the catchment area of Wien River mainly concerned the brooks Lainzer Bach, Ameisbach and Ottakringer Bach. A total of 208.547 kilometres of sewers for an amount of 12.3 million crowns were built from 1851 to 1890.

By 1903, the public sewer network of enlarged Vienna had grown by another 277.085 kilometres. Over this period, the total cost of providing the neighbourhoods inside and outside the Gürtel boulevard attained close to 33 million crowns.

Fig. 10, Filtering basin of the vaulted-over Lainzer Bach in Lainz, circa 1910



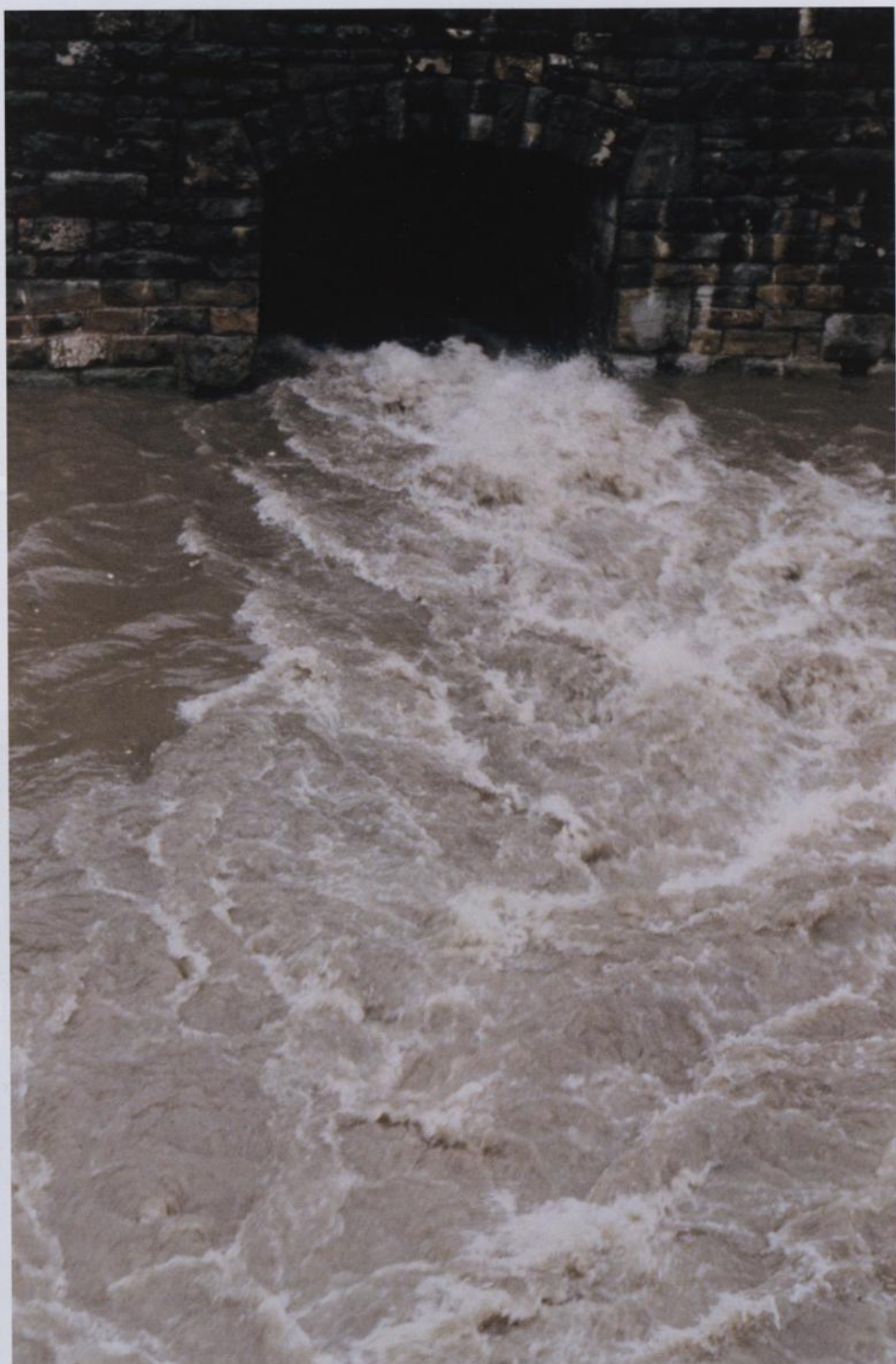


Fig. 11, Rainwater outlet of Lainzer Bach into Wien River during a stormwater event

In the years before the First World War, the network of canalised streams in the catchment area of Wien River was again given priority. One example was the extension of the vaulting-over of Ameisbach up to Baumgartner Höhe, the housing-in of the lower reaches of Rosenbach in Hütteldorf, of Ottakringer Bach as well as of Lainzer Bach, Lackenbach and Marienbach in the 13th municipal district. Since vaulting-over in the direct catchment area of Danube Canal had already progressed very far, the rapid population growth in the western working-class districts beyond the Gürtel now called for the intensified construction of urgently required bypasses for the vaulted-over Alsbach and Währinger Bach.

Smaller, formerly quite unknown brooks were likewise housed in, e.g. in 1904 Multikaulifelder Bach, a rivulet in the catchment area of Nesselbach, which originated near the Cobenzl estate and starting in 1909 also carried the wastewater of that manor.

After 1900, with the growth of the city, brook canalisation gradually moved to the boundaries of the Vienna Woods and thus initiated the systematic grid-type development of the former suburban villages. In 1910, more than two million inhabitants were living in the Austro-Hungarian capital.

As already mentioned, the history of Vienna's canalised streams is closely linked to that of the city. While the water of the brooks once had fostered the emergence of most villages and settlements that today make up the metropolitan area of Vienna, the eleven big canalised streams and their bypasses contributed and still contribute significantly to wastewater disposal.

The entire catchment area of the vaulted-over brooks is a respectable 76.5 square kilometres or approx. 20 percent of the current municipal territory.

Due to the watershed along the north-western ridge of the Vienna Woods, the canalised streams can be differentiated into those

debouching into the Right Main Collector running parallel to the right bank of Danube Canal (these brooks formerly discharged into the old branch of the Danube) and those first discharging into the Left and Right Wien River Collectors (these brooks formerly debouched into Wien River). From north to south, the first group is comprised of Schreiberbach in Nussdorf, originating in the Wildgrube valley; Nesselbach, which flows from Grinzing via Heiligenstadt; Arbesbach, which descends from Sievering; Krottenbach, which originates in Neustift; and Währinger Bach, which takes its origins in Pötzleinsdorf and Gersthof, then crosses Währing and joins with Alsbach at the covered market of Alsergrund, the latter watercourse reaching the 9th municipal district in Zimmermannplatz square after flowing through Neuwaldegg, Dornbach and Hernals.

From east to west, the following watercourses discharge into the Left Wien River Collector: Ottakringer Bach (originates in Liebhartstal valley), Ameisbach (originates in Steinhof) and Rosenbach in Hütteldorf; from east to west, the Right Wien River Collector absorbs Lainzer Bach (originates in the Lainzer Tiergarten wildlife preserve) and Marienbach (originates in Ober St. Veit).

To this day, these eleven major canalised streams form the backbone of wastewater disposal between Danube Canal and the hilly ridge of the Vienna Woods. Along their course, they absorb numerous smaller streams, such as Lackenbach, Rotherdbach or Halterbach.

Already around the last turn of the century, the high level of urban condensation necessitated the construction of big bypasses, such as those mentioned for Alsbach and Währinger Bach but also for Ottakringer Bach in order to effectively combat floods in case of stormwater events.

The completion of the Second Mountain Spring Pipeline and the construction of an efficient sewer system finally spelled an end to the grave sanitary shortcomings that had caused so many diseases and epidemics, and moreover created the necessary infrastructure for a thriving metropolis.

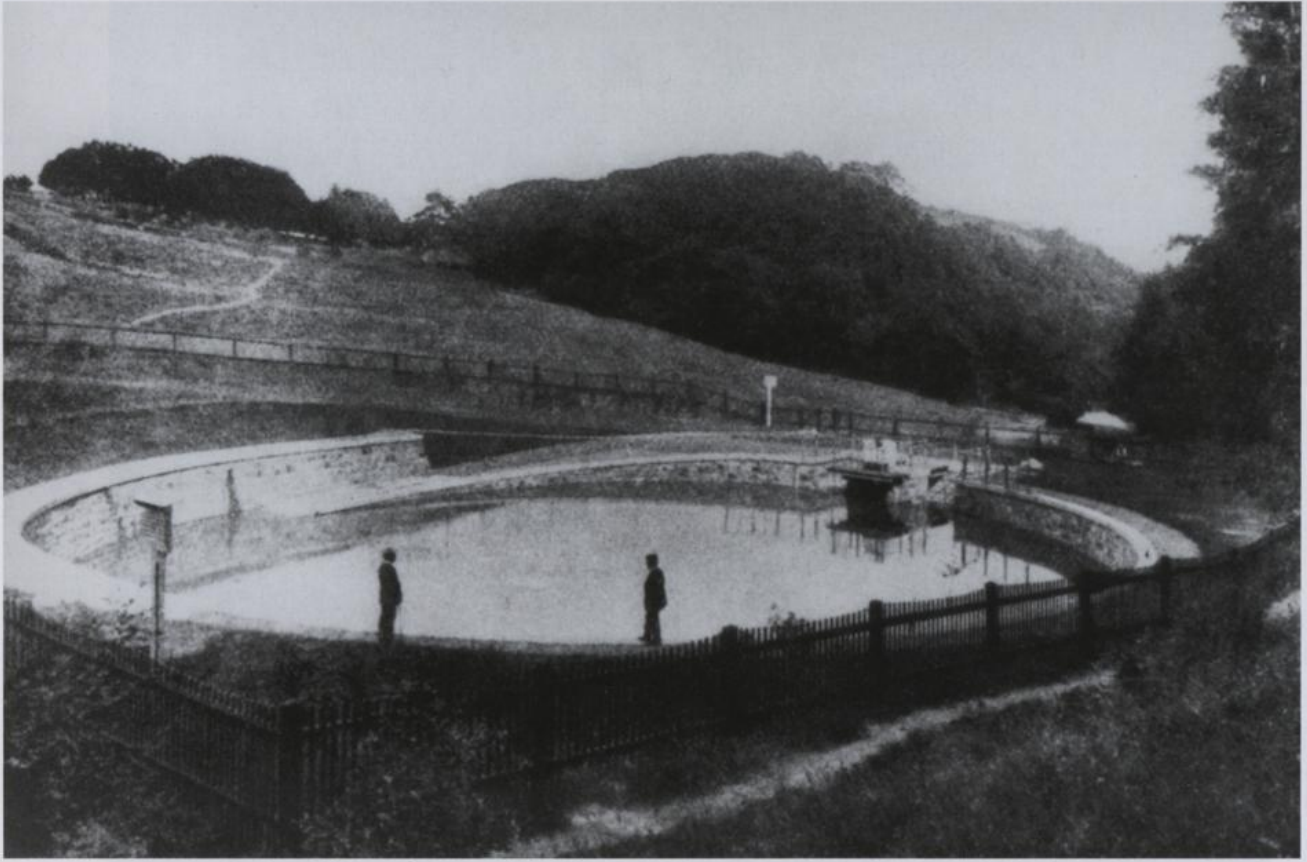


Fig. 12, Filtering basin of Nesselbach in Grinzing, circa 1905

The outlook of the old villages and vintners' communities changed quickly in the wake of the vaulting-over of the brooks, and the city began to spread to the edge of the Vienna Woods.

While the vaulting-over of the historic streams in the late Biedermeier era had constituted an immense step forward in ensuring public hygiene, the onset of the industrial age and the Gründerzeit period made their extension a sanitary priority.

Those problems would doubtless be resolved differently in today's era of renaturation and technology downscaling; in those days, however, the unshakeable faith in engineering prevailed uncontested.



Fig. 13, Upper course of Arbesbach in Sievering, circa 1960

And so these old brooks merely survive in some of the place and street names of this city. Far from the centre, amidst Vienna's Green Belt, their last vestiges – the only spots where we can still find Alsbach, Schreiberbach or Sieveringer Bach – can be found.



Fig. 14, Upper course of Arbesbach in Sievering, circa 1960

Perhaps the present article will provide some stimulus to embark on a search for these last vestiges and to rediscover a piece of "Old Vienna" in the process.



Fig. 15 and 16, Idyllic Schreiberbach, which inspired the 2nd movement of Beethoven's Pastoral Symphony, usually referred to as "By the brook"





Fig. 17, Upper course of Arbesbach

