

Henry Sully's Life Story - Chapter 3 Netherlands

By Robert St-Louis, Ottawa, Canada, September 2022 – All rights reserved

SULLY IN THE NETHERLANDS (1707 to 1711) - Draft

This is the third chapter in the life story of Henry Sully (1679 – 1728), and follows the previous chapter that saw the young clockmaker complete his lengthy apprenticeship with renowned Fleet Street clockmaker and horological merchant Charles Gretton (1647/8 – 1731). In this chapter, Sully relocates to the Netherlands (first residing in The Hague, then in Leiden) to pursue his horological career, and also father four children through his first wife. While in Leiden, Sully wrote his first horological publication, in French.

HISTORICAL CONTEXT

Travel by sea from England to the Netherlands (Low Countries) was quite common since the Middle Ages - for example, English and Scottish students going to study medicine at universities of Leiden and Utrecht, or young men who went to banking and commercial houses of Amsterdam and Rotterdam to learn book-keeping and international exchange. A common route in the 18th century was from Harwich in Essex County, to the Holland port of Helvoetsluys. From there, the traveler could take a coach to The Hague or other destinations in Holland. The trip by boat from Harwich to Holland was obviously much longer (150 miles) than the one from Dover to Calais (27 miles).

As the late J.H. Leopold wrote in 1980¹, the mutual influences of Dutch and English clockmakers go back to the end of the 16th century, and “undoubtedly took place through personal contact between the clockmakers of the two countries”. A lot of attention in horological literature over the years has been placed on Dutch makers who travelled to England to broaden their knowledge and experience, and several of them in fact eventually settled in England (not always in London) to open a shop. The famous Fromanteel family of Dutch/English clockmakers particularly illustrates the close ties between the two countries in this regard. However, there were several English clockmakers, trained and made members of the London Clockmaker’s Company, who eventually went to settle and have long established careers in the Netherlands (Anthoine Guiguer, Edward Brookes, Thomas Rudkin, and Nicholas Massy are a few mentioned by Leopold). In May 1697 the great Thomas Tompion obtained a passport for The Netherlands², so even great English clockmakers felt the need to go check out Dutch horological developments from time to time.

The period from 1585 to 1672 is referred to as the “Dutch Golden Age”, which saw cosmopolitan cities like Amsterdam benefit from a great economic boom. The country had a strong reputation for tolerance, and many people from other European countries found refuge there, from religious persecution and other pressures on personal safety and freedom. The Dutch republic became a leading center of learning, philosophy, science, and art. It also became a

¹ J.H. Leopold, *Clockmaking in Britain and the Netherlands*, Royal Society, London, 1980

² Leopold 89, from Symonds 51

center of publishing unrivaled in Europe, producing hundreds if not thousands of books and pamphlets every year, in different languages and destined for other countries.

In 1670, Dutch philosopher Baruch Spinoza held up Amsterdam as an example of freedom of expression “where”, he said “the fruits of this liberty of thought and opinion are seen in its wonderful increase, and testified to by the admiration of every people. In this most flourishing republic and noble city, men of every nation, and creed, and sect live together in the utmost harmony.” It is not surprising that the Netherlands should have attracted a lot of people of various backgrounds and interests to its shores, and this included a number of English horologists, as was indicated above.

During lengthy wars between 1689 and 1713 the two nations of England and the Netherlands were allies and fought on the same side. This promoted exchanges between the two countries, of both raw and manufactured goods, as well as craftsmen. The general atmosphere in England regarding exports was generally one of optimism. At that time, the principal export from England to the Continent was woolen goods.³ As the 18th century progressed, increasing exports of other manufactured goods were destined not only to the European Continent, but mainly to the English colonies. For some decades already, the English reputation for manufacture of fine clocks and watches had been quite high, and these products, especially from the shops of some of the better known and respected makers around London, were in considerable demand both in Europe and in the Colonies.

SULLY ON THE MOVE

As a recently freed watch/clockmaker from then Clockmakers Company in London, Henry Sully could have obtained employment anywhere, as a skilled and well-trained English watch/clockmaker, apprenticed in Charles Gretton’s shop, one of the most reputable in London. Clearly, something drew him to leave England and explore life on the continent. Dr. Johnson has famously quipped: “when a man is tired of London, he is tired of life”. But having been raised in a bucolic country village in Somerset, perhaps young Henry had grown weary of the busy, dirty metropolis, after having spent over 10 years working there, and sought a quieter, cleaner place to raise a family. Also, London was probably not the easiest place to start a clockmaking business, as the competition was very fierce among established shops, including Gretton’s.

The fact that Holland was the birthplace of Christiaan Huygens, one of the most important horological innovators in history, and someone for whom Sully showed great admiration, was certainly another strong possible attractor. Also, all the positive aspects of the Netherlands, coming out of the “Dutch Golden Age”, would have enticed an ambitious and driven young man like Sully to consider at least temporarily living there.

(Another article, entitled “Henry Sully – move to the Netherlands – ca 1705-07”, published on timetales.ca on September 2020, offers interesting discussions about reasons why Sully may have decided to relocate there.)

³ Davis, Ralph, English Foreign Trade 1700-1774, The Economic History Review, 1962.

When Sully had met with Wren then Newton in 1703 to discuss his ambitions to design and construct a marine clock to determine longitude, either or both of them could well have advised him to go to Holland and learn about the work of Christiaan Huygens in this area, and possibly meet some of his collaborators who were still alive (Huygens himself had died in 1695, when Sully was only 16 and just starting his work in Gretton's shop). One such collaborator was Bernard van der Cloesen⁴ (164?-1736), a clockmaker who had worked closely with Huygens in 1694 on the latter's last marine clock, and so could have been very useful in imparting to Henry some of the older master's theories and designs.

More than just a maker of clocks and watches, Van der Cloesen was knowledgeable in all kinds of scientific instruments, on which he had apparently regularly worked with Huygens. In 1711-12, he was commissioned to restore the Sphaera Movens, nicknamed the Leyden Sphaera, the oldest planetarium in the Netherlands, which was built in 1670 and resided at Leiden University. This suggests that if Sully did meet Van der Cloesen while he resided in the Hague, the latter could have taught additional aspects of Dutch horology than those he may not have been exposed to before, while in London.

The Hague was an important horological centre in the Netherlands, and it was there that Huygens, in collaboration with clockmaker Salomon Coster, and later Claude Pascal, built his first balance clocks.

The three major seafaring nations at that time were England, France, and Holland. While great developments in marine chronometer development occurred in England later in the 18th century (notably through John Harrison's well-known and lengthy efforts), followed by France (notably by the Swiss Ferdinand Berthoud, in a vigorous competition with Julien LeRoy's son Pierre⁵), early efforts by Huygens placed Holland at the vanguard of developments in this area.

As we shall see in a later chapter, Sully, an Englishman, was to inspire himself by the Dutch efforts spearheaded by Huygens, and bring forth designs of his own, while living in France. Some of the necessary technical elements for a reliable marine timekeeper just weren't fully developed by this time, and while his attempts were not crowned with unmitigated success, Sully nevertheless set an example that certainly influenced the efforts of LeRoy and Berthoud some decades later, although probably not those of the Englishman Harrison.

MARRIAGE AND FAMILY (THE HAGUE, LEIDEN, PARIS)

One aspect of Henry's life which coincided with him venturing off for horological discoveries in the Netherlands, was getting married and raising a family. This intimate family dimension of Sully's story has rarely been mentioned in past writings about him, and yet it obviously constituted an important dimension in his life. We know from Church records that Sully and his wife Anne (or Anna) Horton resided in The Hague by August 1707, as revealed by the baptism and marriage book of the English church in The Hague, where one finds the following entry:

⁴ Van der Cloesen was born in Emmerik, married in The Hague where he became a citizen in 1688, the year in which the Clockmakers' Guild was established. He became Warden and later was given the role of Master in the Guild.

⁵ For a good overview on this rivalry, see pp. 167-170 in David Landes, *Revolution in Time*, Harvard, 1983.

21 Aug. 1707, Sully, Anna, dr. van Henry, en Anna Horton. Witness: Mr. Nicholas Massy and Mrs. Anna Benson.

In the register of UK, Foreign, and Overseas British Subjects 1628-1969, is the following entry which confirms the christening of Anna Sully, daughter of Henry Sully and Anna Horton, on 21(?) August 1707, in the Hague. The witnesses Nicholas Massy and Anna Benson are also identified.

The Year	10 Baptismes	Witnesses
1707	<p>Georg James son to Thomas, London, and Anne Nicols his Wife, was Baptiz'd on the 22.th day of May St. No: 1707.</p> <p>Anna Daughter to Henry Sully, and Anna Horton his Wife, was Baptiz'd on the 21.th day of August St. No: 1707.</p>	<p>M^r: James Scott — and M^r: Pabish de La Jozze</p> <p>M^r: Nicholas Massy — and M^r: Anna Benson.</p>

Figure 1 Christening of Anna Sully, daughter of Henry Sully and Anna Horton

Nicholas Massy (III) was mentioned earlier as one of those English clockmakers who decided to resettle in the Netherlands, and is another interesting figure to be associated with Sully at that time, in The Hague. He was the son of Nicholas (II), a French Huguenot refugee in London who had run a watchmaking business on Cranbourn Street until his death in 1698. Nicholas (III) settled in The Hague in 1700. Possibly, Sully may have known Massy while he was apprenticed with Gretton, or Henry may have known Nicholas's brother, also named Henry and who stayed in London. Either or both of the brothers may have encouraged Sully to join Nicholas in the Netherlands sometime after 1705. They must have been quite close, for Massy agreed to be a witness at the christening of Sully's first child.⁶

Some research has suggested that Massy may have been a practicing clockmaker in Lausanne at that time. In "The Marine Chronometer", Gould scribbled a note in the margin about Massy's writing on the subject, saying that "I have a copy, but have never had time to read it through. It appears to be devastatingly dull – and I can read most things about bygone technology." Gould goes on to suggest that Massy's prize "may have served to re-awaken Sully's interest in the subject, for in 1721 he began the construction of a marine timekeeper upon a new principle".

⁶ Nicholas Massy went on to win the second prize in 1720 by the Académie des Sciences de Paris, on the subject of marine navigation. The first prize was won by Jean-Pierre Crouzaz, a professor of philosophy and mathematics at the University of Lausanne in Switzerland.

By the summer of 1708, Sully and his wife had relocated to Leiden, where records indicated the birth and baptisms of three children in rapid succession: two sons, Henry (July 1708) and Jean (July 1709), and a daughter, Henrietta (November 1710). The online archives of Leiden (Netherlands) feature interesting birth records for children of one Henry Sully (married to Anna Horton). The first two records are actually written in French. The witnesses for the first child (Henry) are Jean Scalogue and Elizabeth Ingenegeer. The witnesses for the second child (Jean) are Jean Horton (likely the brother or father of the mother) and Marthe du Mas.⁷

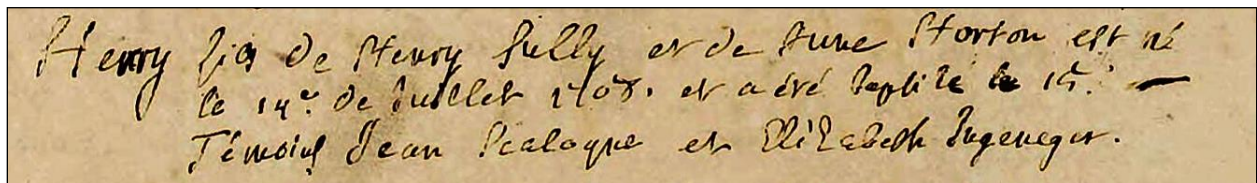


Figure 2 Baptême de Henry, fils de Henry Sully et de Anne Horton.

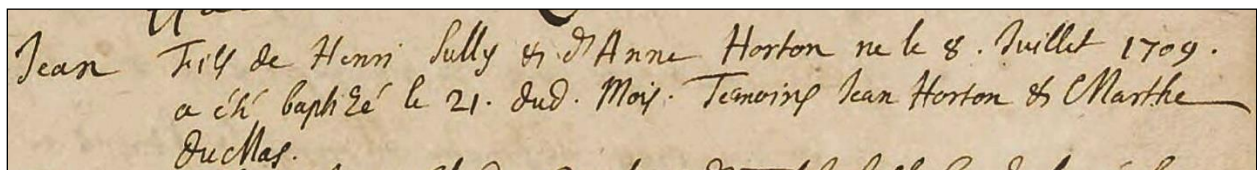


Figure 3 Baptême de Jean fils de Henri Sully et de Anne Horton

Another online record in Leiden (*Baptisms Pieterskerk May 2, 1710 – 1724*) registers the baptism on 30 November 1710 of Henrietta, daughter of “Henrik Sully” and Anna Horton. Witnesses were “Jan Horton” and “Dina Sully”. “Jan” Horton is likely Anna’s father or brother, identified as “Jean” in a previous baptism. “Dina Sully” is probably Dinah Gunning, Henry Sully’s mother, who may have to make the long journey from Somerset to Holland, to possibly help Sully and Anna with their young family (four children born in four years!).

Jean (or Jan) Horton posing his signature as witness to Sully’s second and third children, suggests that he was likely living in Leiden, which seems to indicate that Henry may have met and married his daughter (or sister) Anne/Anna after relocating to the Netherlands. No marriage record for Henry Sully and Anne (Anna) Horton has been uncovered at this time.

⁷ Marthe appears in several records in the Leiden archives, having herself given birth to three children between 1702-06 from her marriage with Jacques Fresné or Frenier.

Jean (a son) was also born in Holland but does not seem to have survived infancy. Charles Henry and Jeanne Angelique were possibly born after his second marriage to Véronique. A birth record in France has been found for Henry (see below) but not for Jeanne Angélique. A death record was found for Jeanne Angélique, who passed away on March 6, 1799, in the 10th arrondissement in Paris. Research to date has not revealed additional details about the lives of Henry's children.

(Another article has been written and posted on timetales.ca on 8 February 2021, referencing Henry Sully's last son, also named Henry (born on 7 May 1721 – see image below). The article, entitled "References to one of Henry Sully's sons" also suggests that Julien Le Roy, identified as the godfather in the birth record for young Henry, may have taken the boy under his wing and turned him into a watchmaker, who died at age 33 in August 1754.)

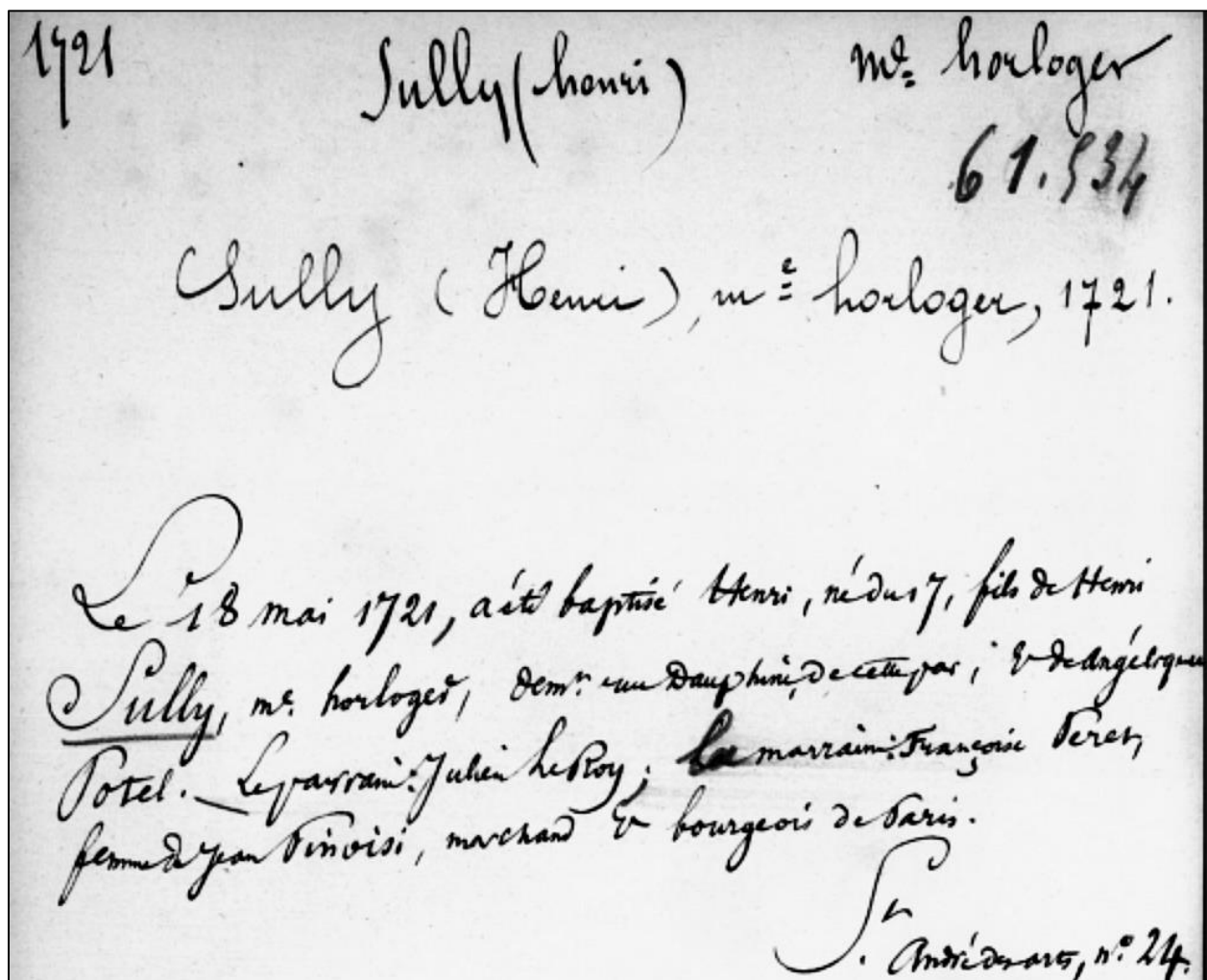


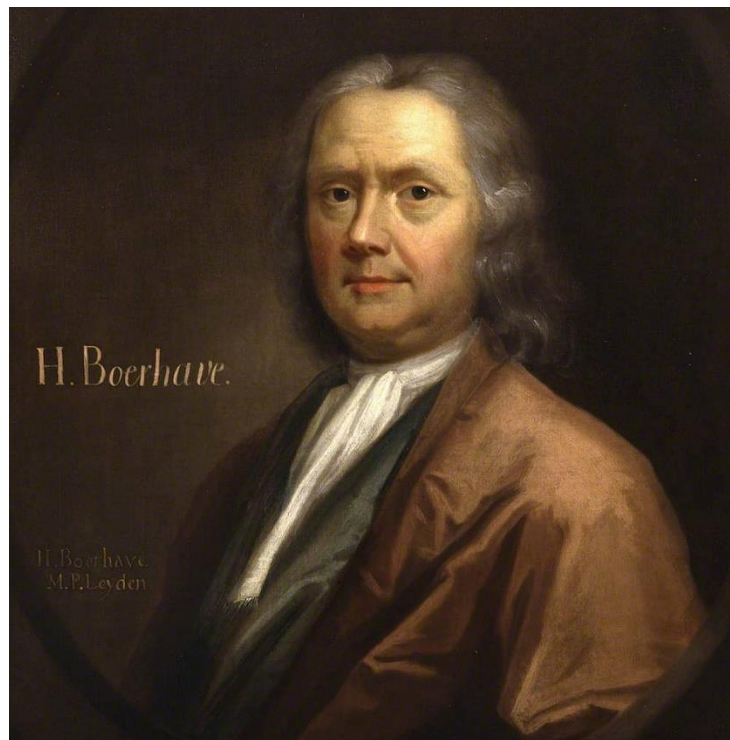
Figure 10 - Baptême de Henry fils de Henry Sully et de Angélique Potel

Having thus described Henry Sully's own family, his two wives and children, we shall return to the story of his life in the Netherlands.

FROM THE HAGUE TO LEIDEN (1708-10)

As we previously saw, by the summer of 1707 Sully was in the Low Countries, for on 21 August his daughter Anna was baptised in the Hague. It's not entirely clear what motivated Sully to relocate himself and his family to Leiden, which is best known for its centuries-old architecture, for being the birthplace of Rembrandt, and for having the Netherlands's oldest university, which dates from 1575. The university contains the Hortus botanicus Leiden Botanical Garden, founded in 1590, and from where the tulip was introduced to Western Europe. A famous alumnus of Leiden University is Christiaan Huygens (1629-1695), who studied mathematics and natural philosophy (physics, astronomy) there starting in 1645. As we already mentioned, Sully was deeply influenced by the work of Huygens, and this may have influenced his decision to relocate.

In Leiden, Sully took the opportunity to meet and have meaningful conversations with some of its illustrious residents. In an autobiographical text written in 1726⁹, Sully wrote that "*the learned and famous Professor Dr. Boerhave¹⁰ will well remember the discussions I had the honour of having with him on this subject [longitude timekeeper] when I was in Leyde [Leiden, Holland] during the years 1708, 1709 and 1710, and with several magistrates of that city.*"



⁹ Footnote (b) of ECLAIRCISSEMENTS section of Sully's 1726 book, published in Paris: Description abrégée d'une horloge de nouvelle invention pour la juste mesure du temps en mer...

¹⁰ Dr. Hermann Boerhaave (1668-1738) was a Dutch botanist, chemist, Christian humanist, and physician of European fame, who taught at the University of Leiden. He introduced the quantitative approach to medicine and was the first physician to use thermometer measurements in clinical practice. His motto was *Simplex sigillum veri*: 'Simplicity is the sign of the truth'. He is often hailed as the "Dutch Hippocrates". (W)

In February 2022, Peter de Clercq from AHS provided me this English translation of a German travelogue by Herrn Zacharias Conrad von Uffenbach¹¹, which describes a visit the author had made to Sully's clockmaker shop in Leiden, on 2 February 1711. His description provides useful insights into Sully's skills as a tool maker (Uffenbach's primary interest was in tools).

In the morning we first went to the clockmaker Hoevenaer, from whom my brother bought some mathematical instruments, made by his father, but he did not even know what they served for. We also went to another clockmaker, who was more sensible. He is an Englishman and is named Sully. He had many and incomparable tools and special instruments, which he had not only made himself with great diligence, but partly had also invented himself. Among others he had one, with which, once the balance has been made, and therefore the centre through which the vice on which it had been turned, has gone away, but when in trying it out it proved to be inaccurate, he could clamp it in once more and improve it most accurately and in balance (literally: with equal weight). Another instrument for the division of teeth on clock wheels, which was supposed to lack the normal shortcomings that such tools have. It had been beautifully executed, and this goes for all his instruments which he all makes himself, and so accurately as we had never seen before. He is so prope that even the handles on the files have been very neatly turned, partly in ivory and ebony, partly in other precious wood. The clamps / ferrules on them were all made in silver, several of them gilded. The instruments were all arranged in good order in small drawers, which together fitted into a small cabinet. From this we concluded that the man must have means; otherwise, he would not be able to devote the time to this. But he did not only have a sound understanding of his art, as we could judge from our discussion, but was also an excellent mechanic. My brother, if he had stayed in Leiden instead of going to Utrecht, could have had learned a lot from him in mechanics.

A few things stand out in the above text. Firstly, Uffenbach was aware of Sully, whether by word or mouth or other means is not known, and visited him after earlier that day visiting another clockmaker, who did not seem to know much about mathematical instruments he had inherited from his father. Sully, however, impressed Uffenbach very much by both the quality of his tools and special instruments, concluding that he was "an excellent mechanic". The execution of the tools, down to finely turned ebony or ivory handles with silver or gilded ferrules, greatly impressed Uffenbach, who offered the interesting suggestion that Sully must have been someone with means, otherwise how would he have found the time to spend on making these impressive tools? Sully's machine to cut wheel teeth was included in the figures and tool descriptions in several horological books of the eighteenth century (notably Diderot and d'Alembert's *Encyclopédie*), and Julien Le Roy was also impressed when he visited Sully's apartment in Paris and saw some of his fine handmade tools (this will be discussed in more detail in a later section dealing with Sully's time in Paris)¹².

Uffenbach's thought that Sully must have had means is an interesting one. Indeed, he cannot have left Gretton's shop in London with any wealth, as watchmakers completing their apprenticeship were generally quite poor. We know that he briefly started a shop in London

¹¹ Herrn Zacharias Conrad von Uffenbach *Merkwuerdige Reisen durch Niedersachsen Holland und Engelland* (1743, three volumes), which details his travels in 1710 and 1711 through Europe. Quote is from vol 3, pp 493-4.

¹² Sully, *Règle artificielle du temps*, Paris, 1737, p. 386

under his name, which would have required some capital to setup, but that he abandoned this for reasons unknown and relocated to the Netherlands (The Hague, then Leiden) where we find him married, with a growing young family, and supposedly living on repairing watches and clocks. So indeed, where did the time and money come from to invent and build wonderful tools, and then launch into a career as a writer? Some of the tools may have accompanied him as a journeyman, and after he left Gretton's shop and went on his own. Apprentices at that time were expected to make their own tools and carry them during their career either as a worker or a full-fledged clock-watchmaker. Given Sully's early experiments with longitude timepieces (which we know he presented to Newton and Wren in 1703, he no doubt had great skills of metal fabrication which would have served him well in tool creation.

The possibility that he may have had "means" suggests a possibility that perhaps Henry Sully came from a family of some wealth in Somerset, who could have financed his move to London and apprenticeship at Gretton's, and later his move to the Netherlands. We know that Henry's father Richard had been a tailor (see Sully's indenture document for apprenticeship with Gretton, in the chapter dealing with London). A tailor would have provided a comfortable existence for his family, but is not considered someone who would necessarily accumulate wealth.

While working as a watch repairer at Leiden Sully wrote his first work, which he had printed and sold mostly by himself. It was entitled: *Abregé de quelques Regles pour faire un bon usage des Montres, avec des Reflexions utiles sur la maniere de les bien raccommoder, et sur les abus qui s'y commettent*. [Summary of some rules to make a good use of watches, and useful reflexions on the way to repair them, and the abuses that can occur.] It seems to have had some success as a second printing was requested by the author in 1711, and a third printing was done in Frankfurt-on-Main the following year¹³.

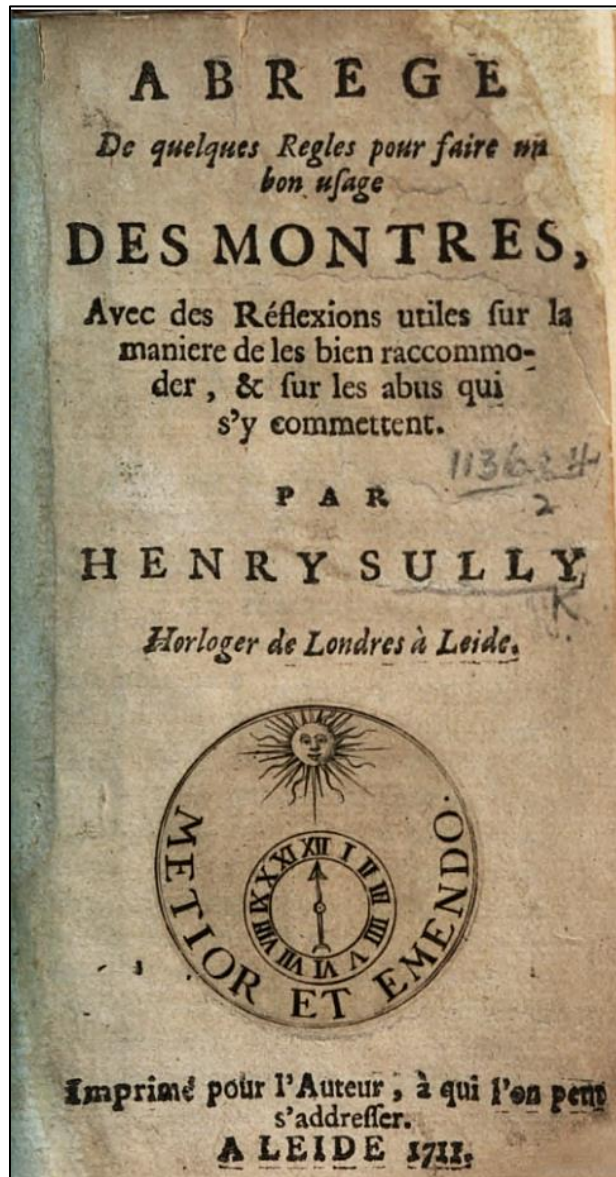
The 1711 (second) edition of the "Abrégé" numbers 24 pages. On the title page Sully is identified as "*Horloger de Londres à Leiden*" [London clock/watchmaker in Leiden]. It is also stated "*Imprimé pour l'auteur, à qui l'on peut s'adresser* » Printed for the author, who can be addressed. The first page is a "*Note to readers and booksellers*", in which Sully writes:

"A few hundred copies of this writing; that I distributed, having been well received by the public, even though I only briefly touched subjects, that are more needed to know by those who want to make good use of their watches, and maybe also, things that are not necessary for those who have some knowledge of horology, I thought it worthwhile to make a second edition, for the use of those who need such help. And to allow those who live too far from the author to be able to address him directly, and also be able to use this text, I advise booksellers of other towns, who may want copies, to address those requests to me, they will have them for the same price as the books that are sold in bookstores."

Clearly, this small booklet, written quickly by Sully, became popular, necessitating him to augment the text and publish a couple of expanded editions. This publication also served as great advertising to his watch and clock repair services, and no doubt put him in contact with some of the affluent and influential people who owned such timepieces at the time (e.g. Boerhave). He must have realized the popularity and importance of such a text, probably never

¹³ L'Europe Savante, February 1718.

written before, and this led to his writing the broader and more detailed “Regle artificielle du tems...” a couple of years later, first published in 1714. A horological writer was born.



It is also significant that Sully chose to write his first book (and subsequent ones) in French, a language he is reported to have learned in Holland, and not his native English. Perhaps he saw it as a way of perfecting his French, and his intention all along was to eventually work his way to Paris, the most powerful city on the Continent, and the heart of French horology. And as he later said himself, there already existed a couple of English books dealing with similar subjects (though not with the same practical focus as Sully's): Horological Dialogues (1675), and Derham's The Artificial Clockmaker (1696). But there was also a very practical reason for writing in French: most of his potential affluent customers on the Continent would have been conversant in that language, rather than English.

On the last page of Sully's 1711 booklet is a text entitled "Notice".

"As I derive a particular pleasure in contributing as much as I can to the reputation of my art and to the advantage that all expect from the utility, if those who own watches, of whatever kind or quality, and from which they don't receive satisfaction, want to entrust me to repair and overhaul them, I pride myself that they will be completely satisfied in all aspects.

I also offer, to satisfy those who are curious and wish to contact me, to entertain them with oral explanations on Automata, on the laws governing complicated movements, on moving mechanisms themselves, and in particular those that serve to measure time, explaining their mechanical, mathematical and physical principles, with many interesting and rare observations, through which anyone can be instructed in the nature and construction of clocks and watches, and consequently be in a position to always make a good choice, and to avoid any fraud by "artists", or by ignorant or malicious people.

The author also advises young clock/watchmakers who may wish to perfect their art, that they will find in him for honest rates all the instructions necessary to make them capable of exercising it [their art] happily and successfully."

Clearly, Sully was promoting his services which appear to have been rather broad. As we have seen earlier, by 1711 Henry had fathered 4 children with his first wife, who sadly died either giving birth to the fourth child, or shortly thereafter. Undoubtedly, he needed money to feed a young family, and was trying to obtain income in whatever way he could, by writing, offering oral information sessions, or training young clock/watchmakers.

One thing that is interesting in the above Notice, is the breadth of Sully's knowledge at the time: automata and other complicated mechanical instruments and mechanisms; watches and clocks of all types; and a practical guide to buying such devices. Evidently, Sully's apprenticeship with Charles Gretton had instructed him into all aspects of clockmaking and watchmaking, but also in other areas of mechanical machines based on clockwork principles and components.

Sully was also demonstrating that he was not only an able writer on the subject, but someone comfortable in discussing horological aspects, whether simple or detailed and complex, to a variety of listeners. Coupled with a clear confidence in his abilities and vast knowledge, this conveys a man who was an entertaining and engaging speaker, who would provide fascinating conversation on a subject that was of great interest to most learned individuals of the time. It helps to explain the great number of influential and important men that he met while in Holland, then later in Vienna, and later still in France.

Actually, signs of his facility and comfort in addressing people of great reputation, was already demonstrated several years before, in London, when as he was completing his apprenticeship with Gretton, he had boldly gone to meet Christopher Wren to discuss his ideas about developing a marine clock, which then led him to go discuss the subject with Isaac Newton and other

influential men in London. One is not surprised to see Sully continue to impress and befriend intelligent and important people on the continent (Boerhave, Leibniz, Massy, d'Arenberg, etc...).

The following chapter will describe Sully's subsequent moves to Frankfurt on Main, in Germany, and then to Vienna, Austria. The influential people and benefactors he met in those two cities would set him on the most consequential period of his professional life, in Paris.