

Baker Street *Elementary*

PRESENTS
"THE LIFE AND TIMES IN VICTORIAN LONDON"



Baker Street *Elementary*

THE LIFE AND TIMES IN VICTORIAN LONDON
057 -- SHERLOCK'S SOUND OF MUSIC -- FEBRUARY, 2022



WELCOME TO TOPIC # 057... TODAY, WATSON AND I WILL BE DISCUSSING THE MUSIC DURING THE VICTORIAN ERA...



IN 'THE ADVENTURE OF THE CARDBOARD BOX,' I SHARED WITH YOU I HAD RECENTLY PURCHASED A STRADIVARIUS VIOLIN WORTH 500 GUINEAS (THE EQUIVALENT OF 10,500 SHILLINGS) FOR 55 SHILLINGS ON TOTTENHAM COURT ROAD — A TRUE FIND.





MY KNOWLEDGE OF THIS INSTRUMENT AND ITS
MAKER WAS ALSO SHOWN DURING A DISCUSSION
COMPARING IT WITH THOSE CRAFTED BY THE
AMATI FAMILY IN A STUDY IN SCARLET.





ANTONIO STRADIVARI HAD PASSED AWAY 150 YEARS BEFORE THIS MENTION IN A STUDY IN SCARLET, BUT HIS FAME AND THOSE OF HIS CREATIONS WERE WELL-ESTABLISHED SHORTLY AFTER HE SET UP HIS BUSINESS IN 1680.



HE HAD LEARNED THE CRAFT FROM THE MASTER
NICOLO AMATI, WHOSE FAMILY HAD LIVED AND
WORKED IN CREMONA FROM ABOUT 1538 TO 1740.



**STRADIVARI SOON PASSED HIS TEACHERS,
HOWEVER, IMPROVING UPON AMATI'S DESIGN BY
CHANGING THE ARCHING, ENSURING MORE EXACT
WOOD THICKNESS, AND ALTERING THE SCROLL
AND VARNISH.**



**THE RESULT WAS AN INSTRUMENT OF SO
SUPERIOR DESIGN, IT HAS YET TO BE SURPASSED.**

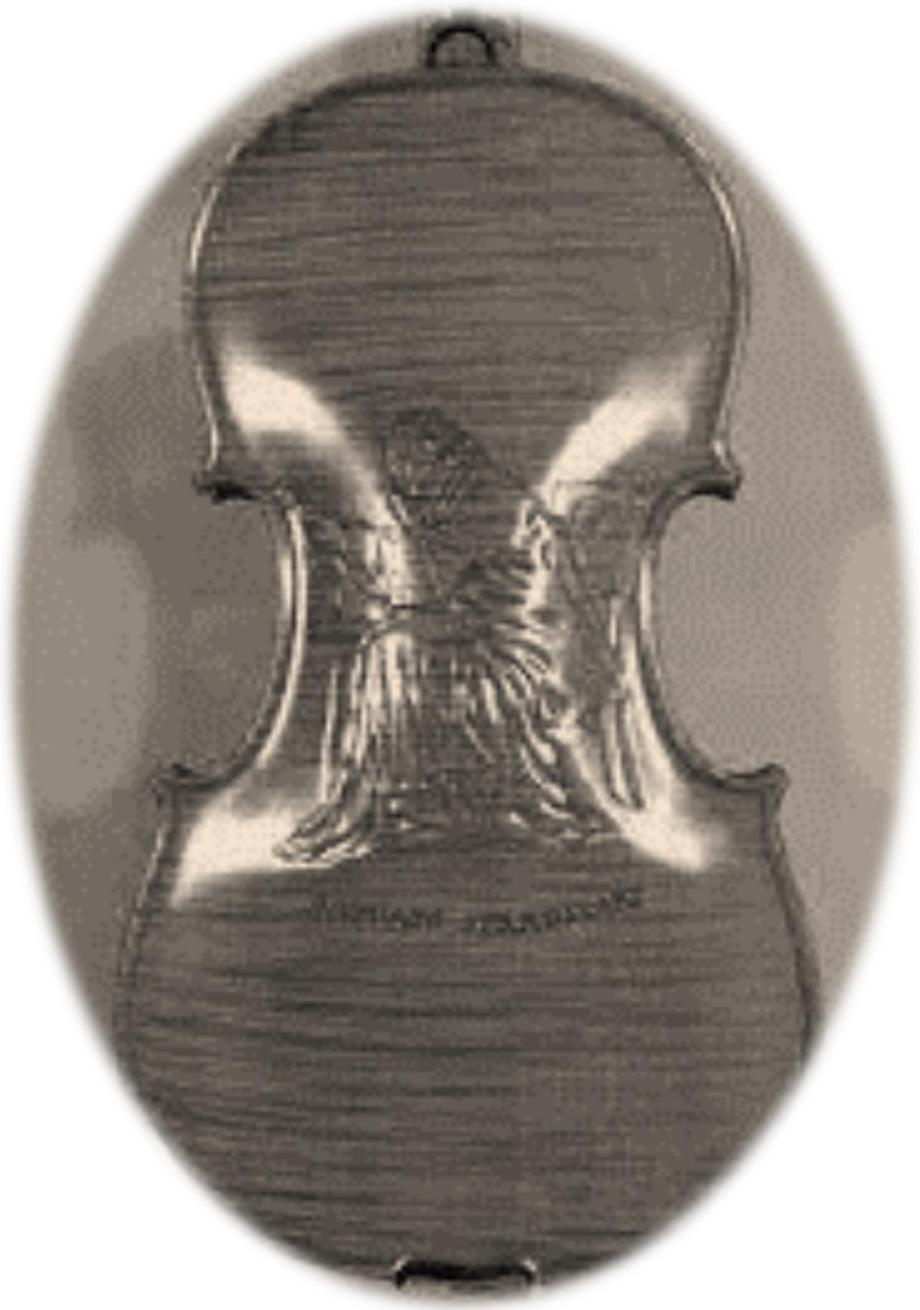


THE TRUE VALUE OF HIS CREATIONS WAS NOT FULLY RECOGNIZED UNTIL THE 1800s WHEN MORE CONCERTS OCCURRED IN GREAT HALLS DEMANDING A STRONGER SOUND.



EXPERTS CONTEND THESE INSTRUMENTS PRODUCE
MUSIC OF GREATER BRILLIANCE (A CLEAN, HIGH-
FREQUENCY SOUND) DEPTH, AND CHARACTER
PRODUCED BY ANY OTHERS.





*THE SCIENCE BEHIND THE SOUND HAS BEEN
SOMETHING OF A MYSTERY.*



STRADIVARI COULD BARELY READ AND HAD NO SCIENTIFIC TRAINING YET WAS ABLE TO CRAFT AN INSTRUMENT THAT HAS YET TO BE REPLICATED.



*THROUGHOUT THE YEARS, FOCUS HAS SHIFTED TO
VARIOUS ASPECTS OF THE DESIGN PROCESS.*



ATTENTION HAD BEEN FIRST DIRECTED AT THE VARNISH, WHICH WAS MORE HIGHLY COLORED THAN PREVIOUS DESIGNS, BUT IT WAS FOUND NOT TO HAVE ANY SPECIAL PROPERTIES.



THE WOOD USED BECAME THE NEXT FOCUS.



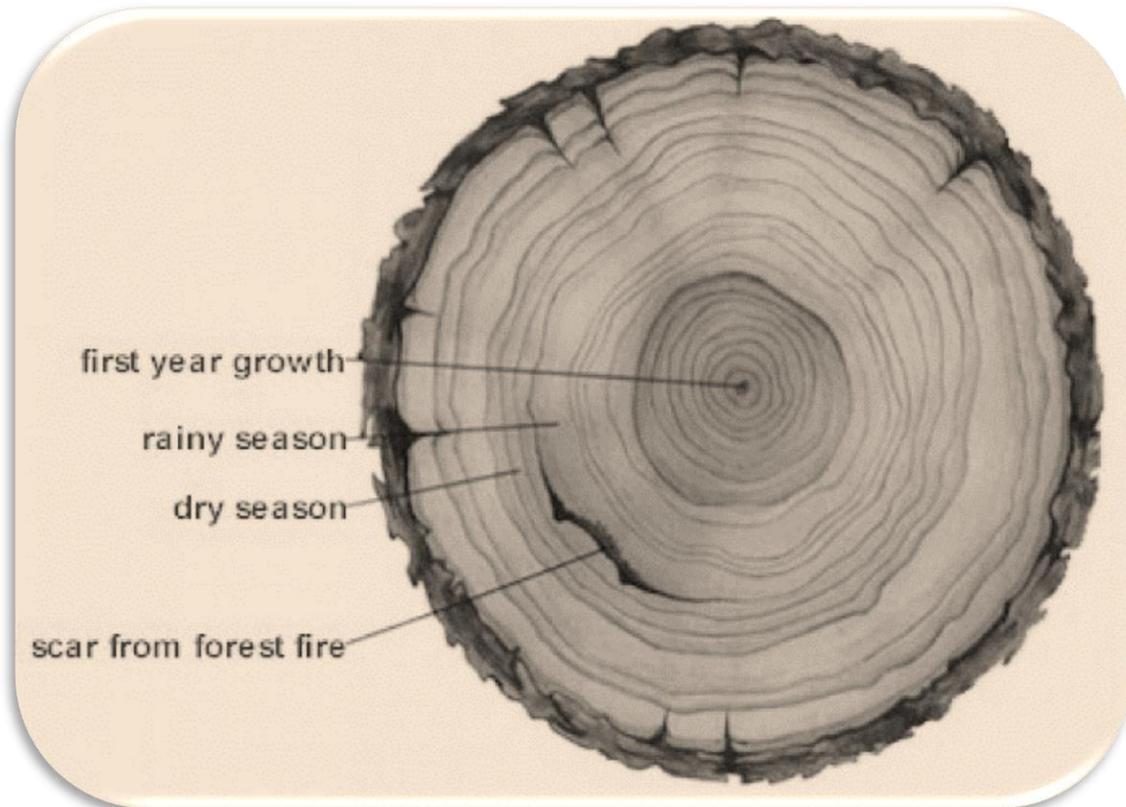
**IN 2003, DR. GRISSINO-MAYER AND TWO COLLEAGUES
PUBLISHED THEIR RESULTS OF AN EXAMINATION OF
THE TREE-RINGS IN THE WOOD USED IN THE
MESSIAH VIOLIN (THE MOST WELL-PRESERVED
STRADIVARIUS) TO DETERMINE ITS ORIGINS.**



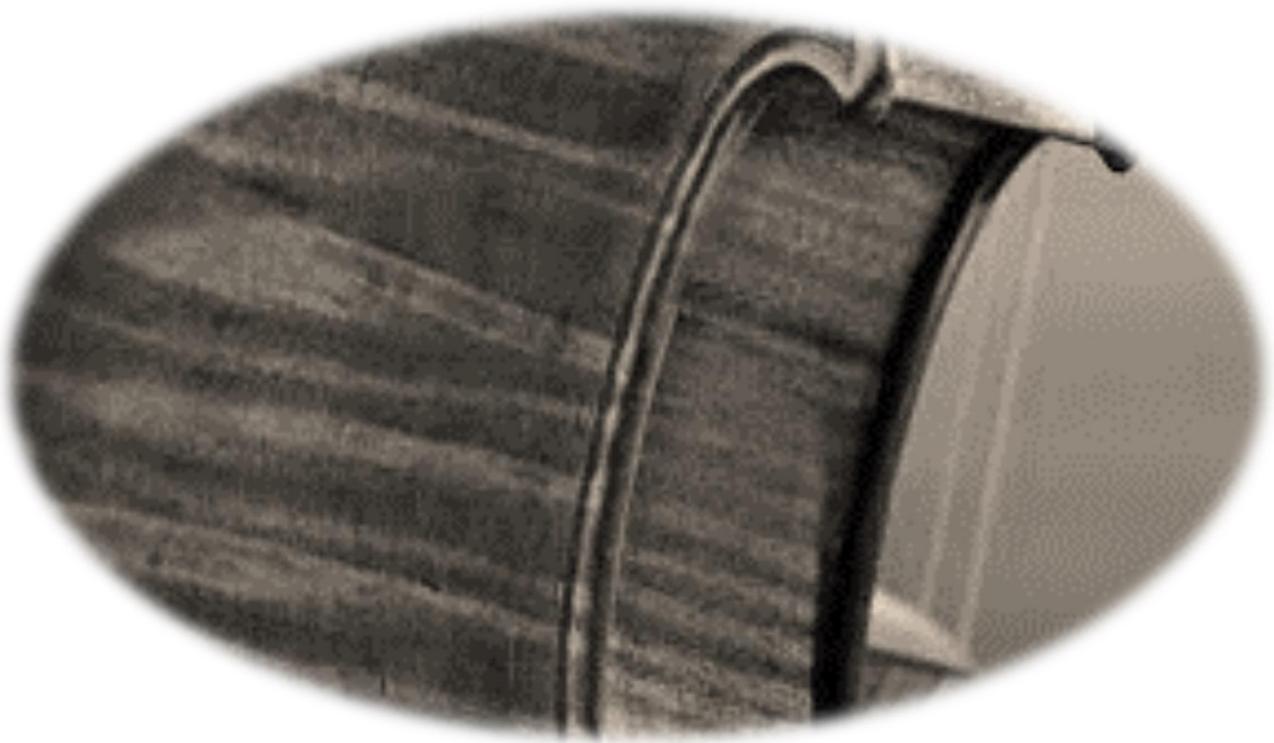
THE TEAM DETERMINED THE WOOD WAS FROM
SPRUCE TREES GROWING DURING THE MAUNDER
MINIMUM, A PERIOD KNOWN FOR LOWER
TEMPERATURES THAT REDUCED TREE GROWTH
RATES AND PRODUCED BETTER SOUNDING BOARDS...
UNFORTUNATELY, HOW THIS PRODUCED SUPERIOR
INSTRUMENTS WAS UNCLEAR.



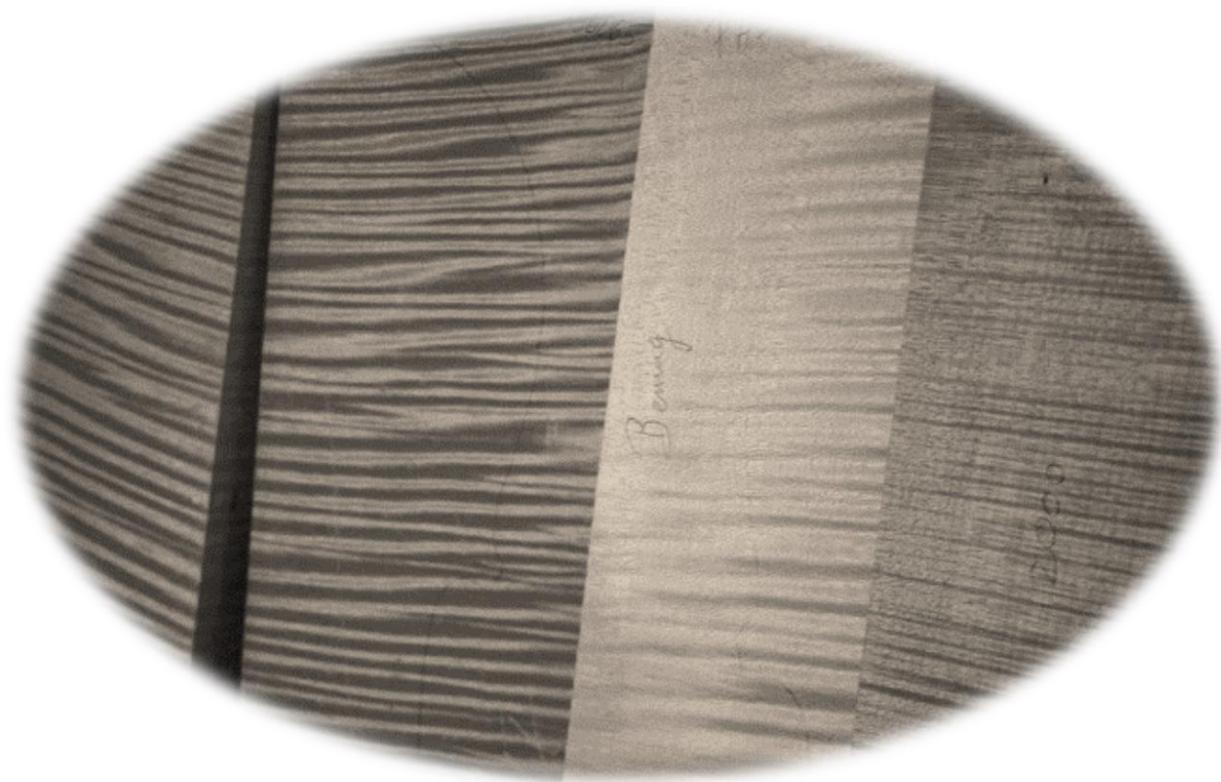
JUST RECENTLY, ATTENTION HAS TURNED TO ANOTHER PROPERTY IN THE WOOD... A VERY COMMON PROBLEM AT THE TIME WAS DETERIORATION BY WORMS AND OTHER ELEMENTS.



**FOREST WORKERS WERE KNOWN TO HAVE USED
SOME CHEMICALS TO PROTECT THE WOOD
BEFORE IT WAS SOLD.**



**IN 2016, SCIENTISTS PUBLISHED A PAPER
DESCRIBING A CHEMICAL ANALYSIS OF THE WOOD
FROM SOME STRADIVARIUS VIOLINS AND FROM
CONTEMPORARY ITEMS.**



*THE RESULTS INDICATE A GREATER
CONCENTRATION OF ALUMINUM, CALCIUM, COPPER,
SODIUM, POTASSIUM, AND ZINC THAN TYPICALLY
FOUND IN SUCH WOOD.*



IN ADDITION, THE WOOD'S DENSITY IS UNIQUE...
GREATER DETACHMENT HAS OCCURRED BETWEEN
THE WOOD FIBERS...



*...ALLOWING FOR GREATER VIBRATIONS AND,
THUS, A VIOLINIST'S GREATER EXPRESSION OF A
RANGE OF EMOTIONS.*



I DESCRIBED YOUR SKILL ON THE
VIOLIN AS 'REMARKABLE.'



*GIVEN MY INSTRUMENT'S SPECIAL PROPERTIES, I
SURELY DID JUSTICE TO MY UNIQUE FIND.*



SO, WE HAVE COMPLETED TOPIC # 057 IN OUR SERIES...

IN TOPIC # 058, WE WILL BE LOOKING AT THE USE OF GAS AS LIGHTNING DURING THE VICTORIAN PERIOD.



ORIGINAL SOURCE MATERIAL FOR THIS TOPIC:

- [HTTP://WWW.THEVIOLINSITE.COM/VIOLIN_MAKING/STRADIVARIUS.HTML](http://www.theviolinsite.com/violin_making/stradivarius.html)
- [HTTPS://EN.WIKIPEDIA.ORG/WIKI/AMATI](https://en.wikipedia.org/wiki/Amati)
- [HTTPS://WWW.BRITANNICA.COM/STORY/WHATS-SO-SPECIAL-ABOUT-STRADIVARIUS-VIOLINS](https://www.britannica.com/story/whats-so-special-about-stradivarius-violins)
- [HTTPS://WWW.RESEARCHGATE.NET/PUBLICATION/222575547_STRADIVARI_VIOLINS_TREE_RINGS_AND_THE_MAUNDER_MINIMUM_A_HYPOTHESIS](https://www.researchgate.net/publication/222575547_STRADIVARI_VIOLINS_TREE_RINGS_AND_THE_MAUNDER_MINIMUM_A_HYPOTHESIS)
- [HTTPS://WWW.NYTIMES.COM/2016/12/20/SCIENCE/STRADIVARI-VIOLIN-WOOD.HTML](https://www.nytimes.com/2016/12/20/science/stradivari-violin-wood.html)
- [HTTP://WWW.PNAS.ORG/CONTENT/PNAS/EARLY/2016/12/13/1611253114.FULL.PDF](http://www.pnas.org/content/pnas/early/2016/12/13/1611253114.full.pdf)



Baker Street *Elementary*

"THE LIFE AND TIMES IN VICTORIAN LONDON"

IS CREATED THROUGH THE INGENUITY & HARD WORK OF:

JOE FAY
LIESE SHERWOOD-FABRE
RUSTY MASON &
STEVE MASON

