

# *Christmas Organ Concert 2005*

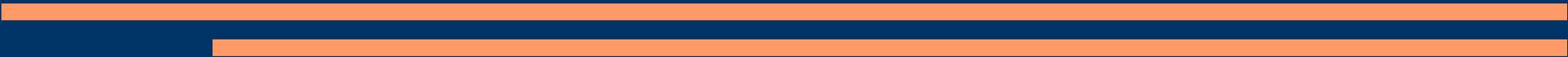
- Franz Schmidt (1874-1939):

## Halleluja-Prelude



# *Welcome*

- Programme:
- - “Halleluja-Prelude” (just heard)
  - Talk “What is an organ?!”
  - The Story of the Shepherds
  - Christmas Songs (by several composers)



# *Marcussen-organ, Laurenskerk, Rotterdam, NL*



4 manuals  
150 ranks  
84 stops  
7486 pipes



# *Hillen-organ, temporarily in Leiden, NL*



1 manual, 3½ ranks, 4 stops, 172 pipes

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# *Garrels-organ, Leiden, NL*

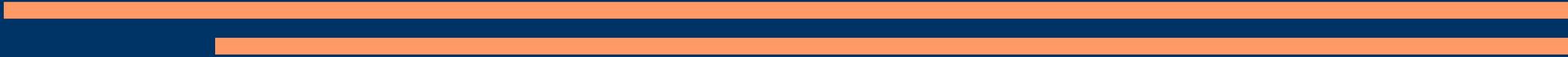


# *Van den Heuvel-organ, St. Eustache, Paris, F*



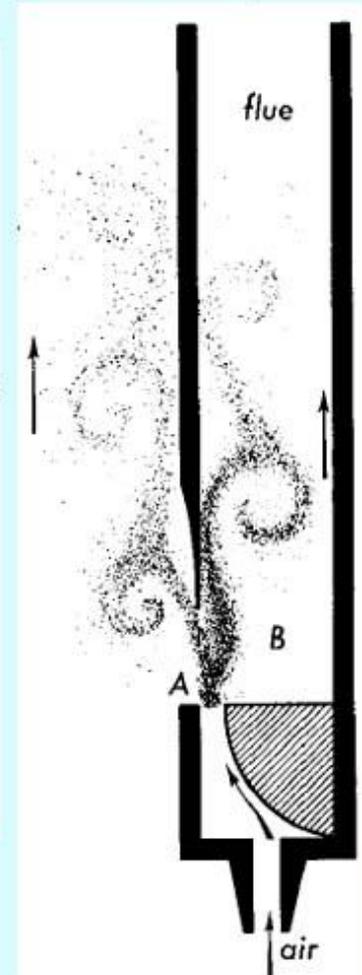
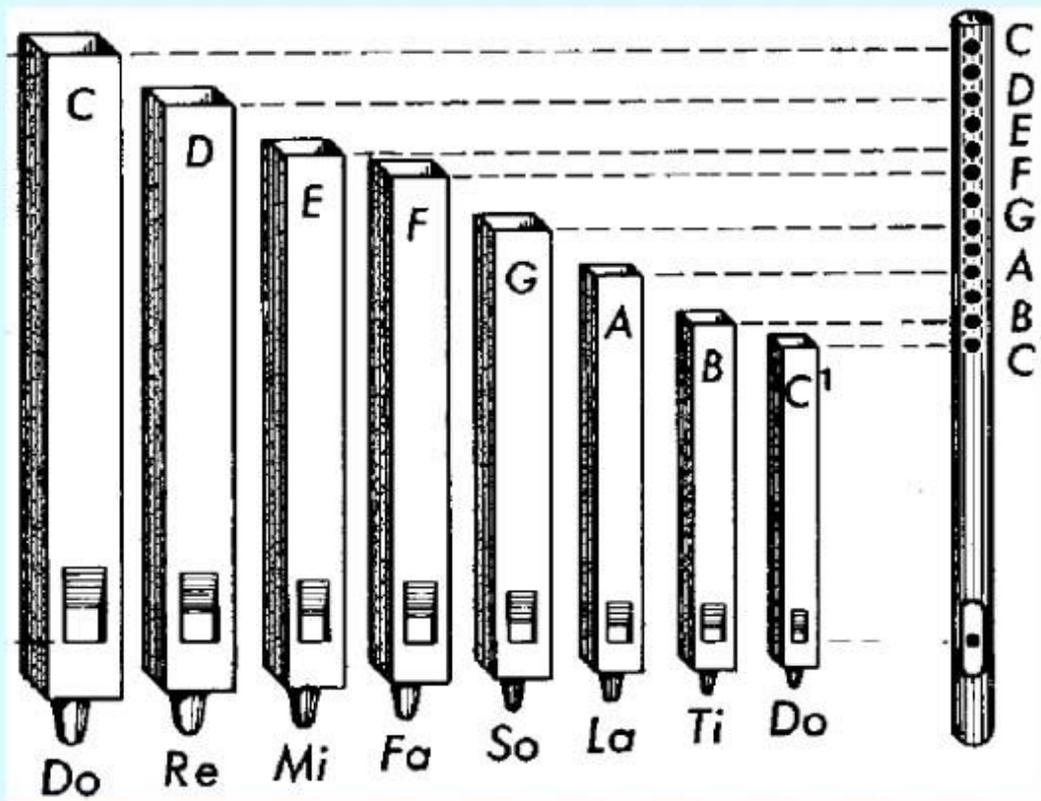
- 5 manuals
- 147 ranks
- 101 stops
- 8000 pipes

# *So, where are all those pipes?*

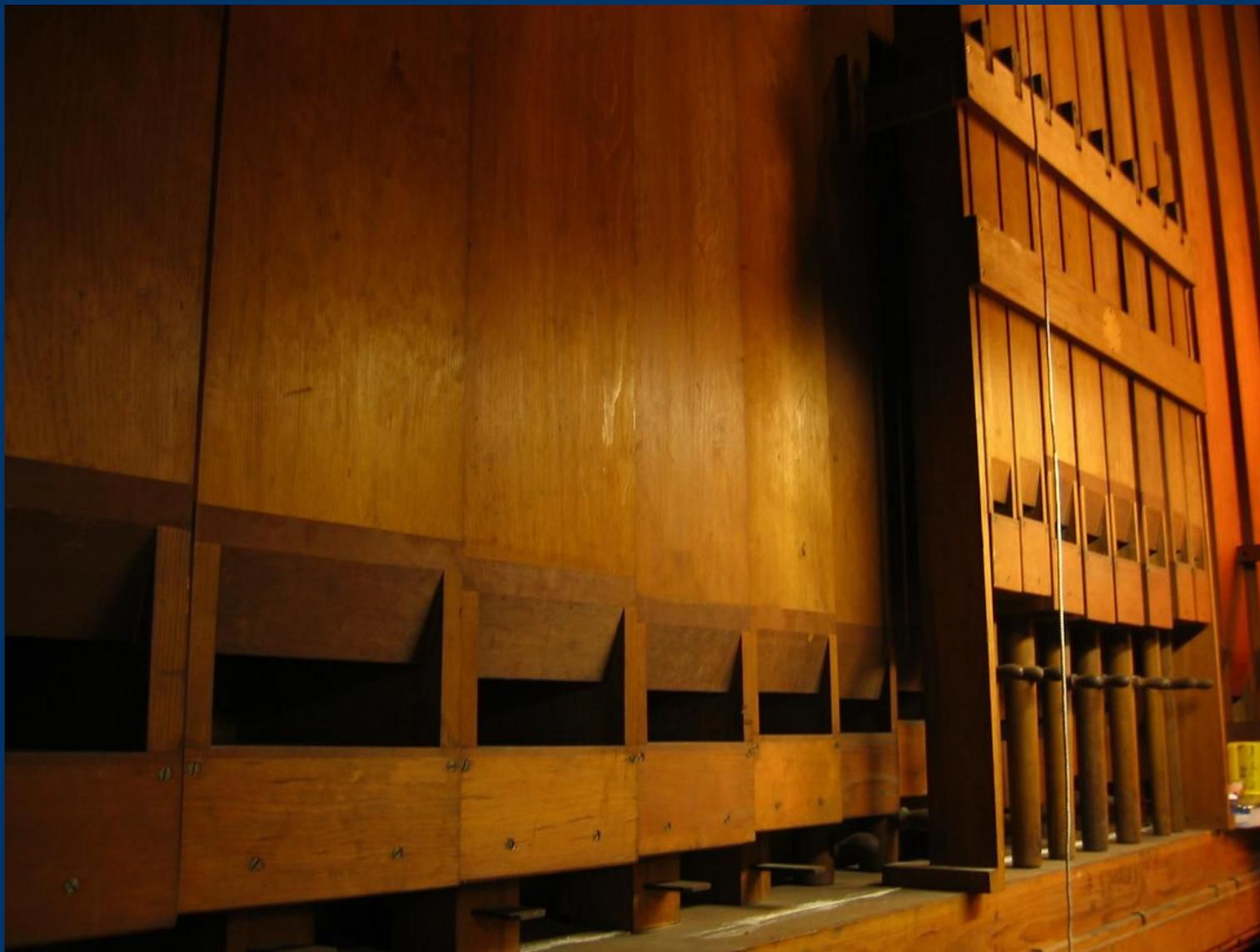


# Different kinds of pipes (1)

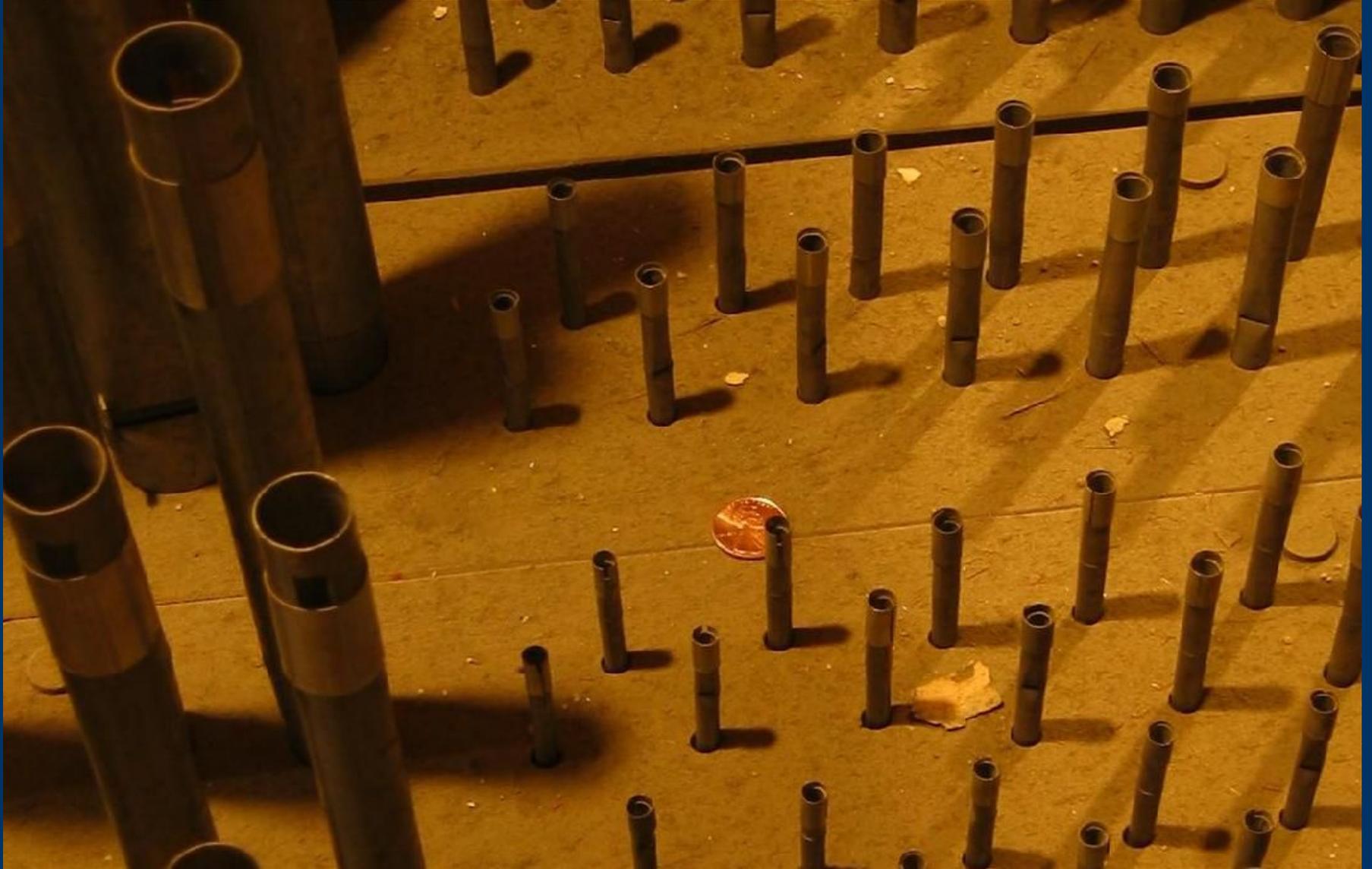
## Resonators & Bernoulli's Principle



# *Flue pipes (Diapason 16')*

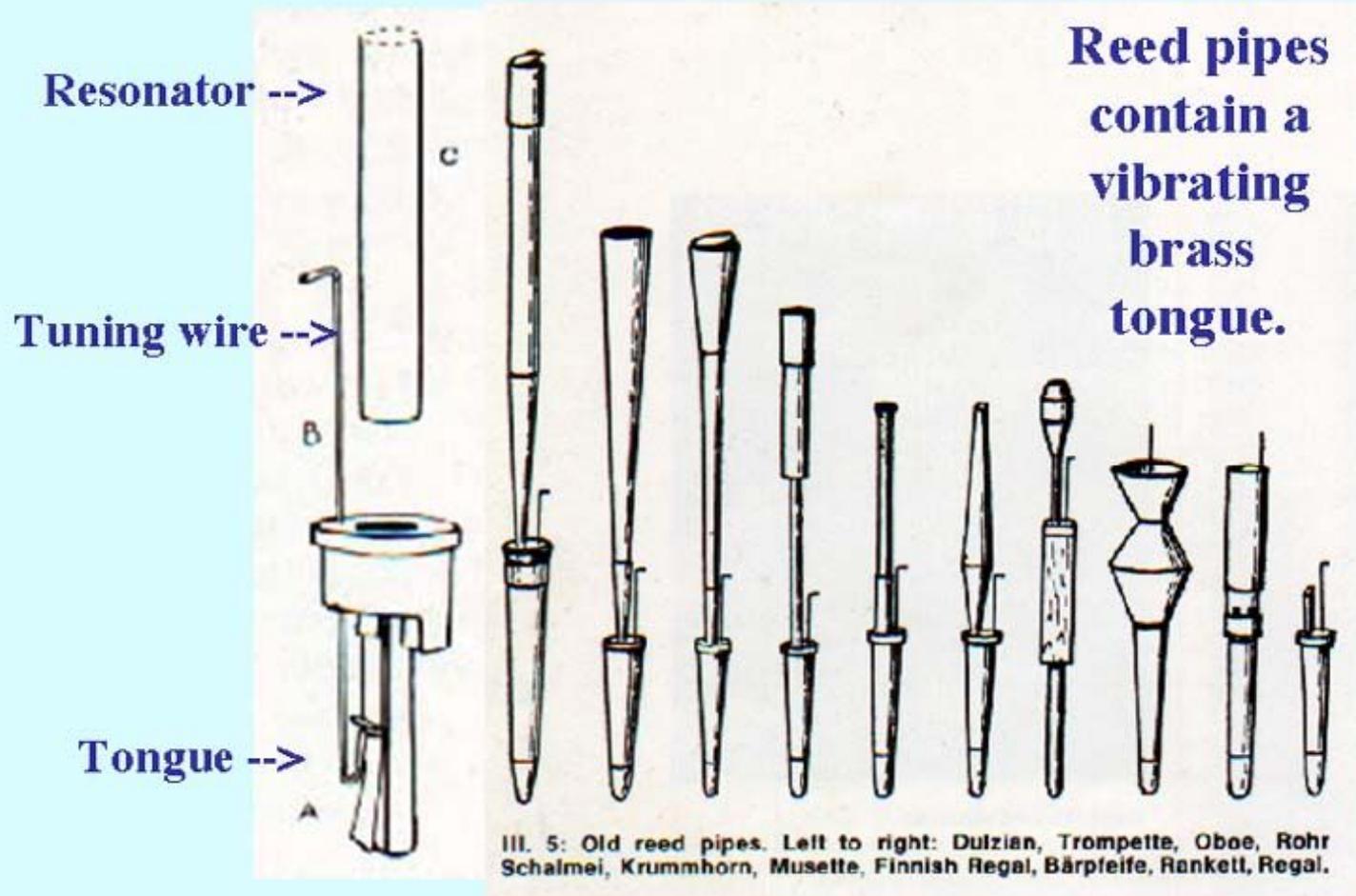


# *Flue pipes (Mixture)*



# Different kinds of pipes (2)

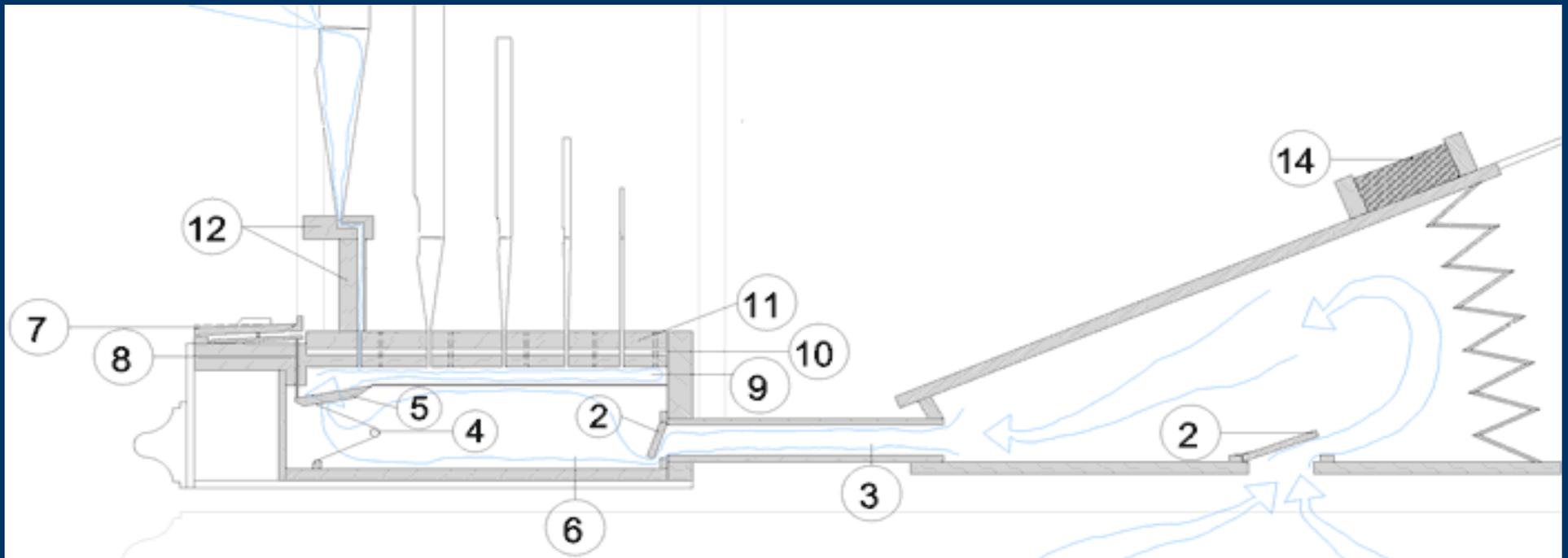
## Organ Reed Pipes



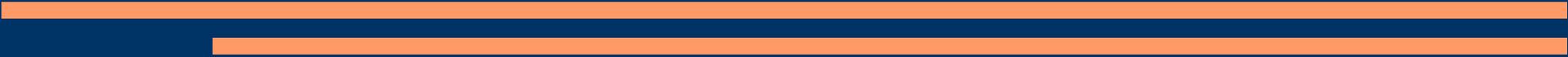
# *Reed pipes (Oboe 8')*



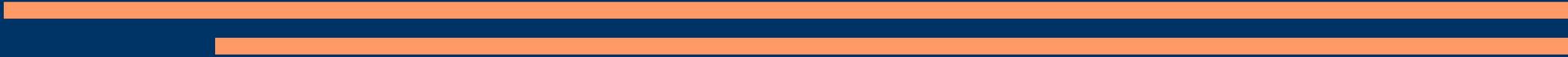
# *The movement of the air*



# *Pulling the strings (1)*



## *Pulling the strings (2)*



# Putting it all together

## Three Division Organ

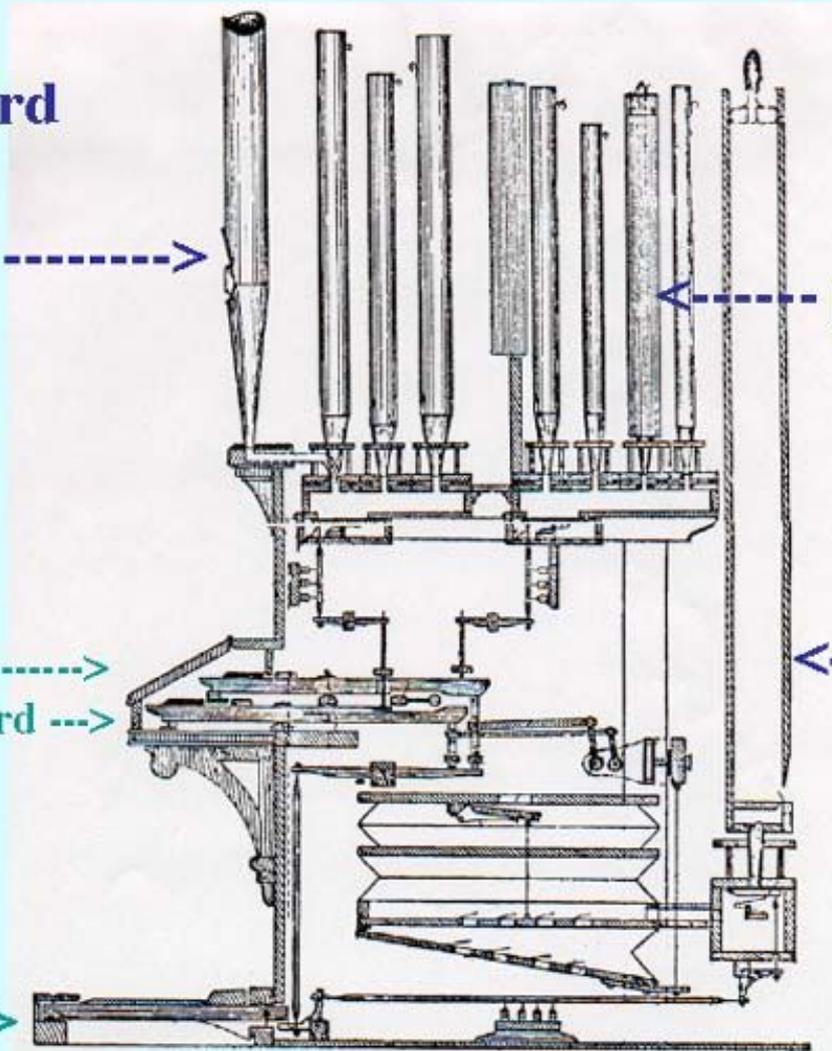
Top keyboard  
plays these  
front pipes

Bottom  
keyboard  
plays these.

Top keyboard ----->  
Bottom keyboard --->

Pedal  
keyboard  
<--- plays these.

Pedal  
keyboard --->



## *History of the organ*

- One of the oldest instruments
  - Invented by Ktesibios of Alexandria (180 BC): hydraulis or water organ
  - Organ competition in Delphi 96 BC
  - Aquincum organ (Budapest) 220 AD
  - Ca. 750 AD: first organ in Western Europe, a present from Byzantium
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***The Aquincum  
organ  
(wooden parts  
reconstructed)***













***Let's hear something!***

