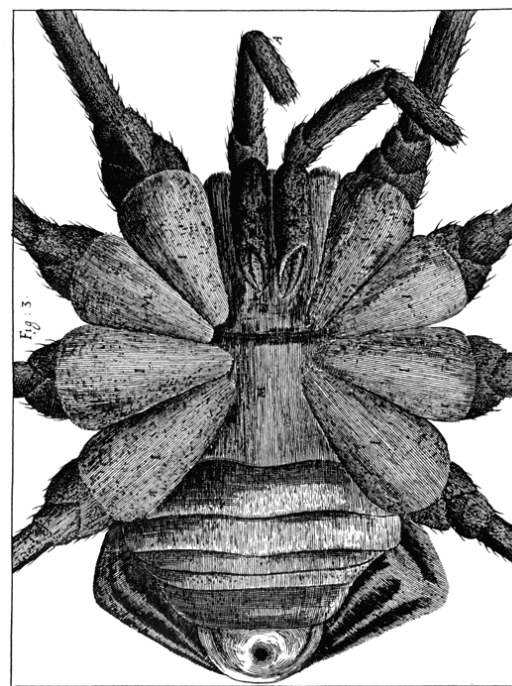
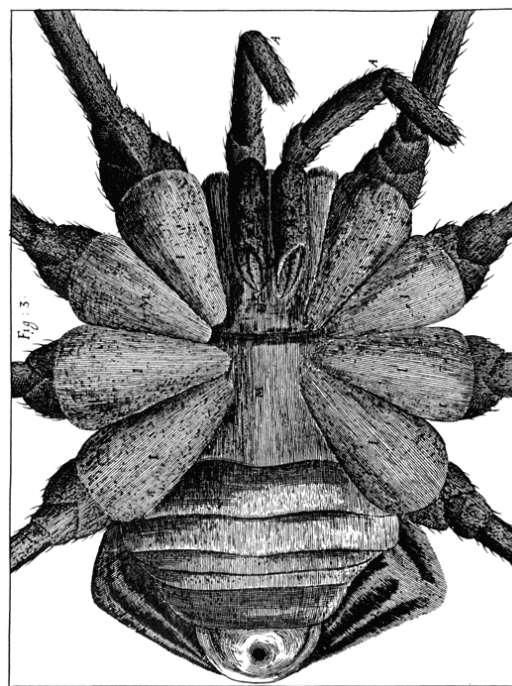
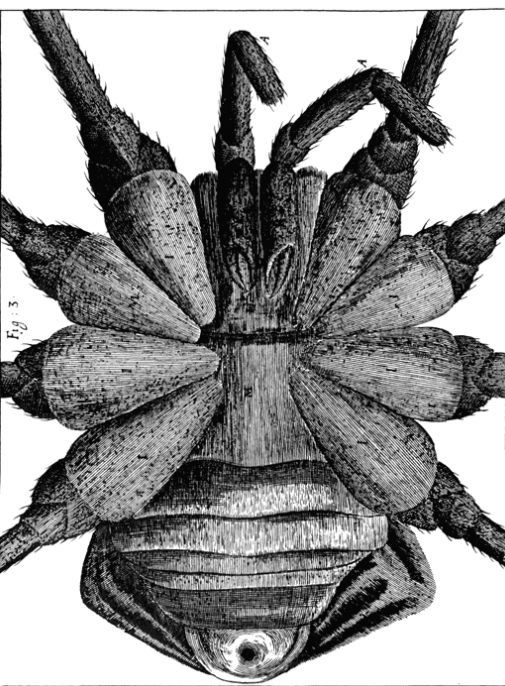
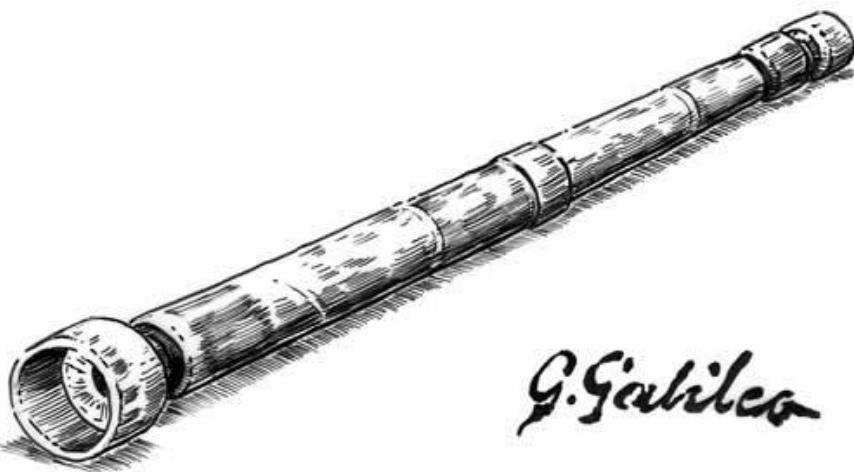


Centres for
'spider
diagrams'



WHY DID PEOPLE LISTEN TO GALILEO AND VESALIUS?

- Use 2-3 sentences to answer this question
- Think about why the believers in the world of Catholic Church domination might start to question their beliefs...



ROBERT HOOKE

AN ENGLISH LEONARDO?



AIMS

- ❑ To explore the work of Robert Hooke
- ❑ To assess whether or not he deserves the title of the “English Leonardo”

ROBERT HOOKE: AN ENGLISH LEONARDO?

Does he
deserve the title
of “England’s
Leonardo?”

This
interpretation of
him comes from
the historian
Allan Chapman.

Who was Leonardo da Vinci?

Very famous, multi-talented thinker.

Did work in the areas of painting, sculpting, architecture, science, music, maths, engineering, literature, anatomy, geology, astronomy, botany, writing, history and cartography.

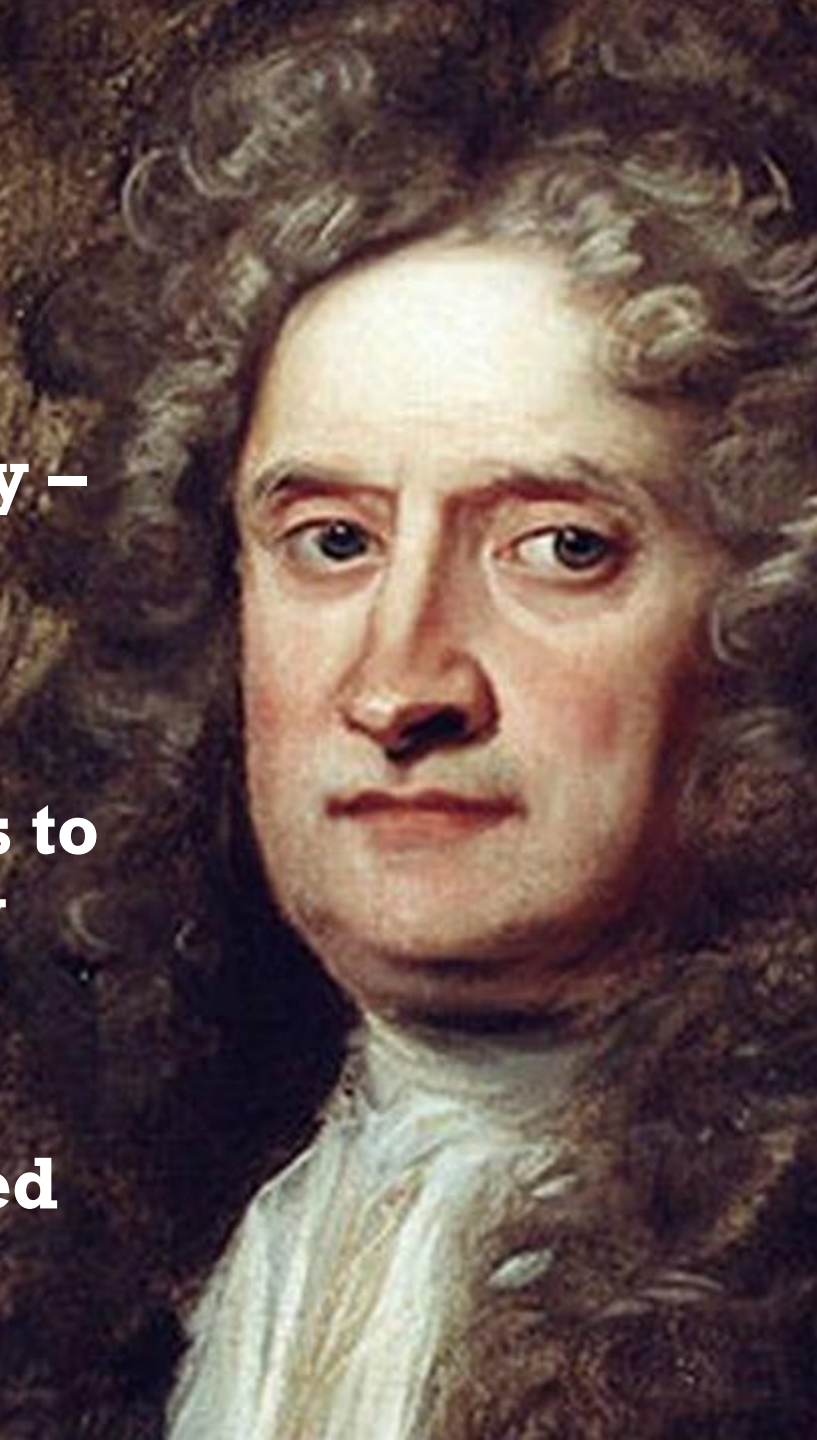
Was famously secretive and didn’t publish most of his ideas, but created some very famous works of art.

He was completely curious about everything in the world but rarely remained focussed on one idea or issue for long enough to investigate it fully.



WHO WAS ROBERT HOOKE?

- **1635-1703**
- **Member of the Royal Society – in charge of demonstrating experiments**
- **Famous for his use of microscopes and telescopes to develop the areas of biology and astronomy**
- **Published a book of his findings and diagrams called 'Micrographia' in 1665**



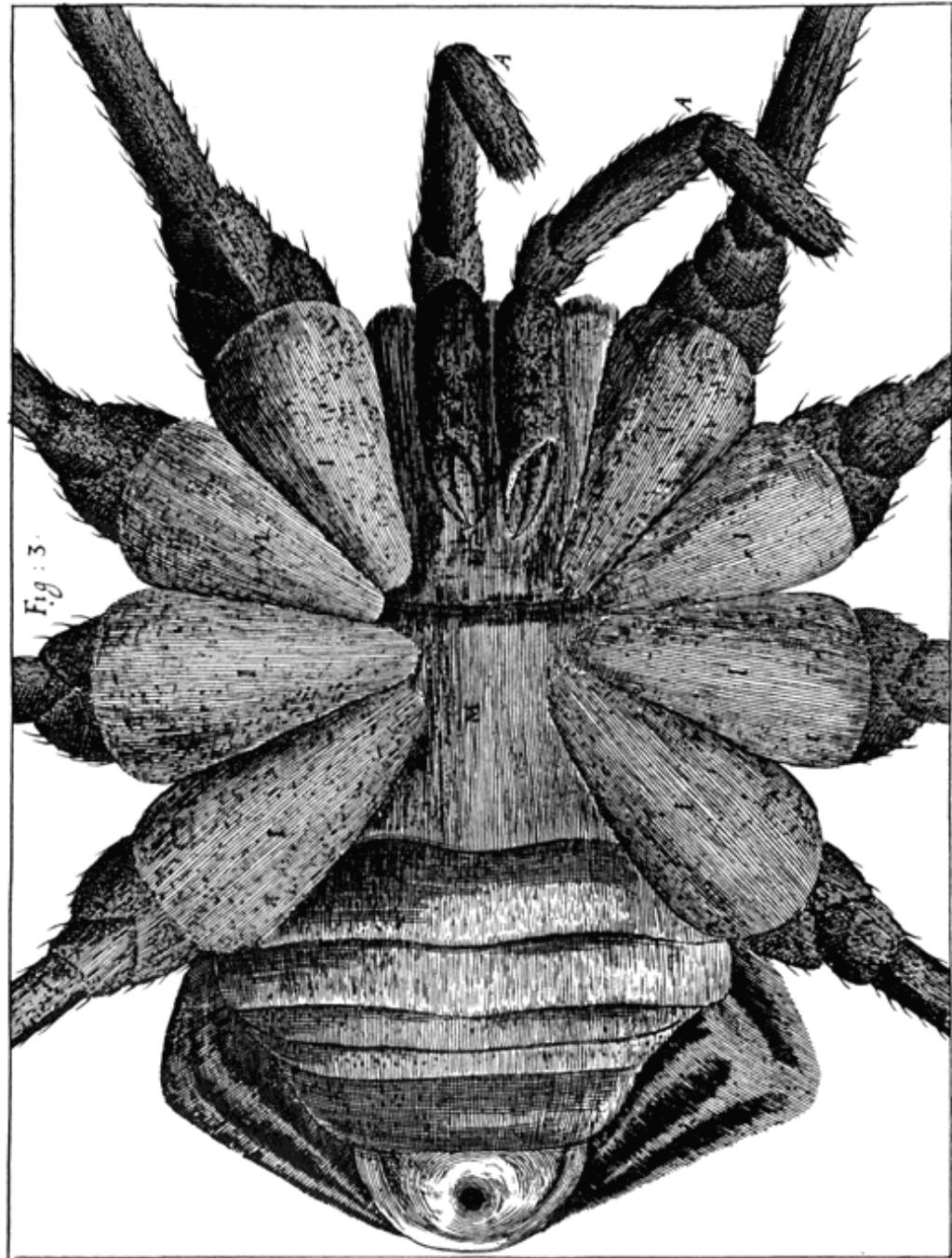
'MICROGRAPHIA'

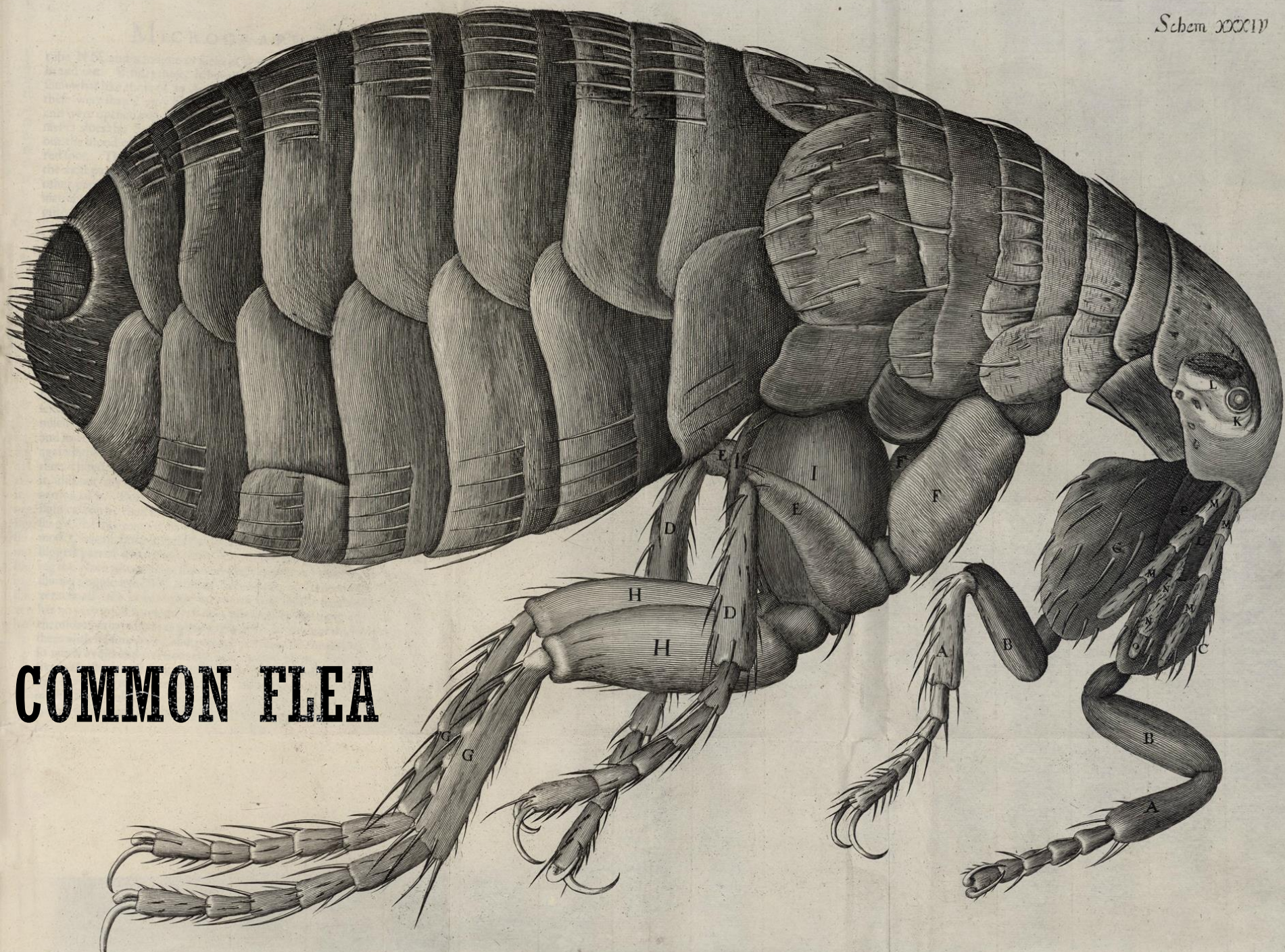
1665

Use the image as the **centre of a 'spider diagram'** to jot down **some things from the clip and the following slides** about *Micrographia*

- Hooke's greatest work
- Most famous for its first-ever illustrations and diagrams of microscopic details
- The quality of the art work was stunning, especially to people at the time

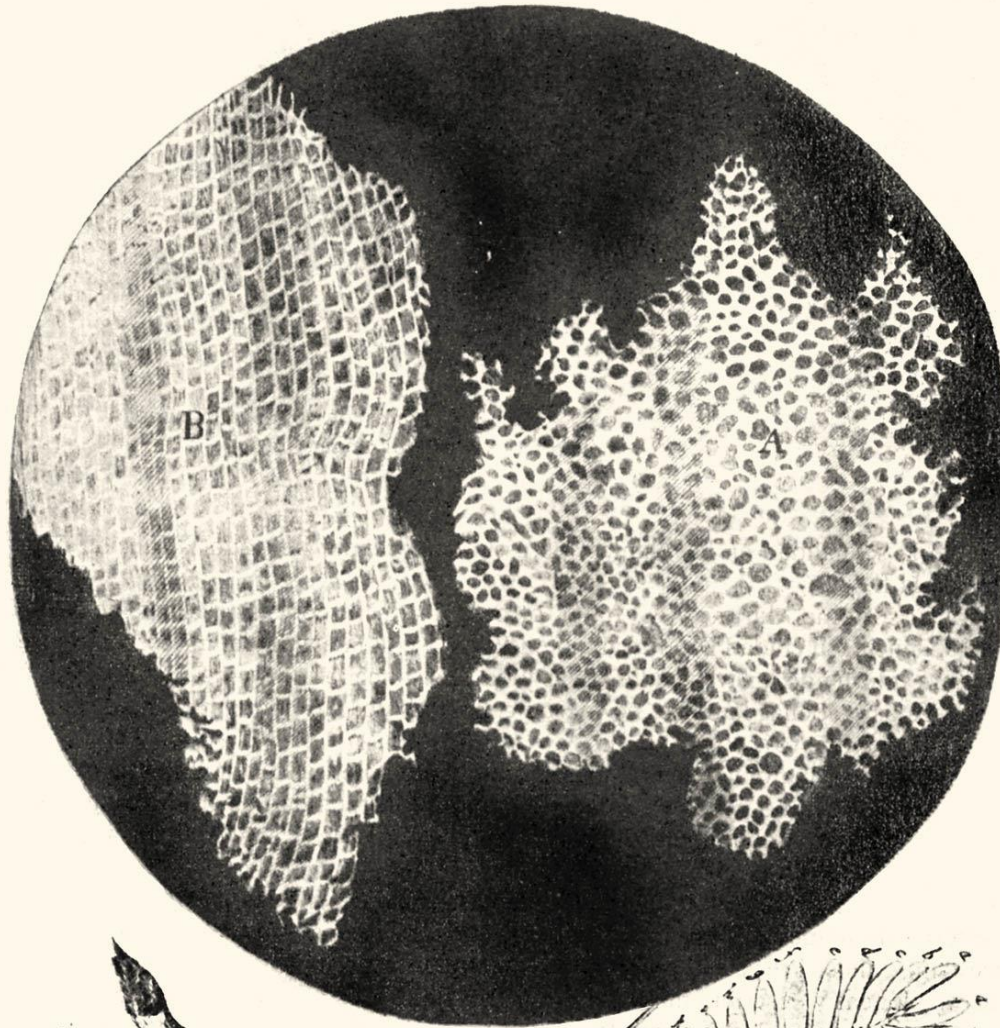
Add to your diagrams using the following slides





COMMON FLEA

Fig: 1.



THE CELL STRUCTURE OF CORK WOOD

Hooke was the first person to invent and use the word 'cell'

It was because of the similarity of the shapes on the left of this image to the cells of monks, prisons and honeycombs

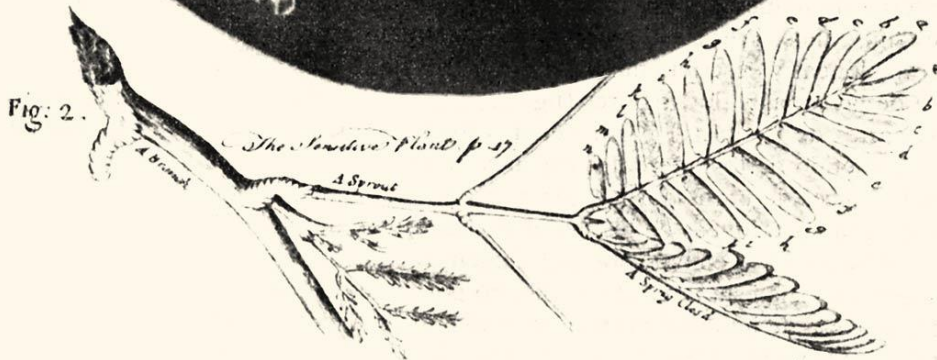
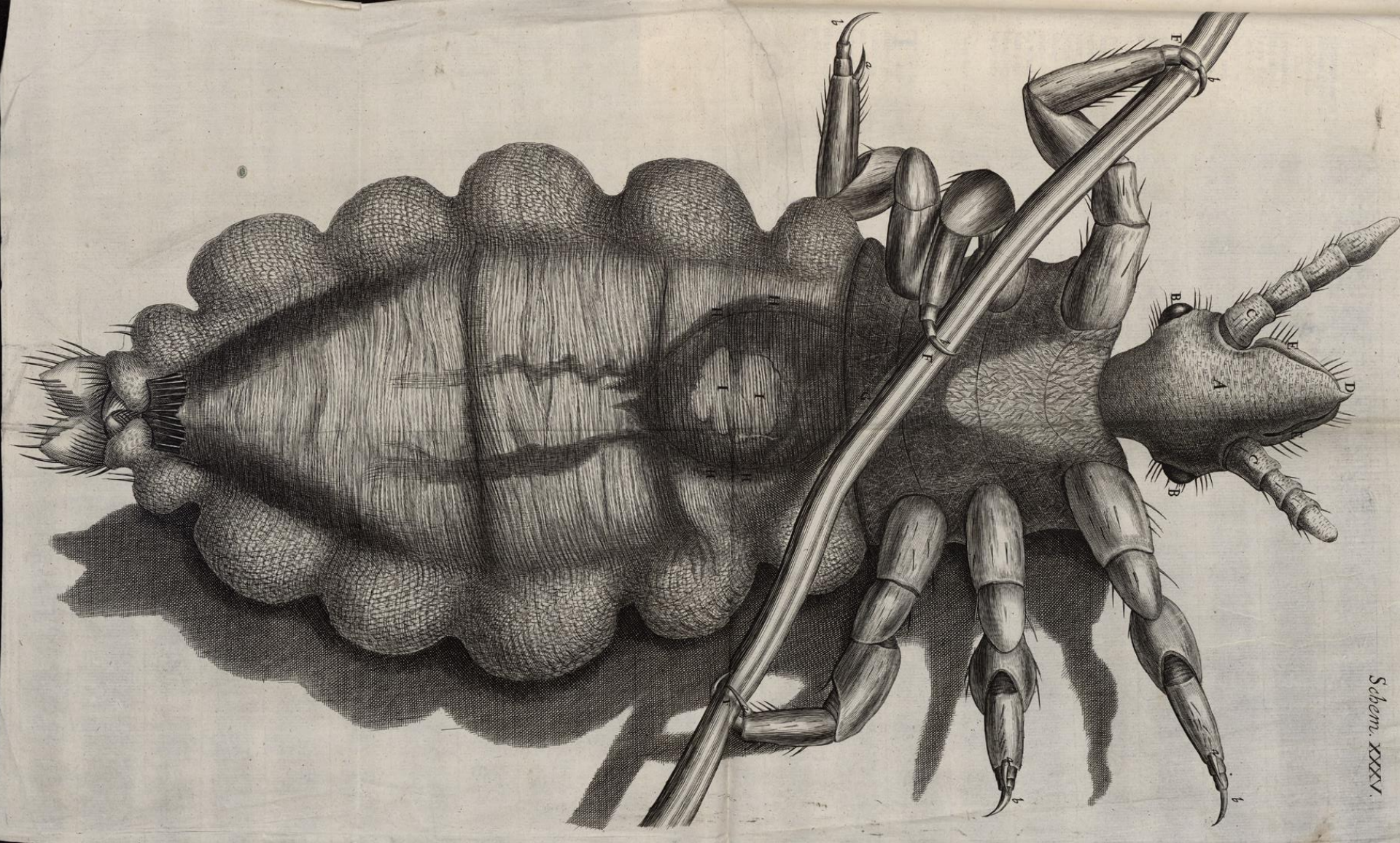


Fig: 2.





COMMON LOUSE

This was a massive 'fold-out' image – it was 4x the size of an ordinary page in the book – look for the creases! (total size 24x38 inches...)

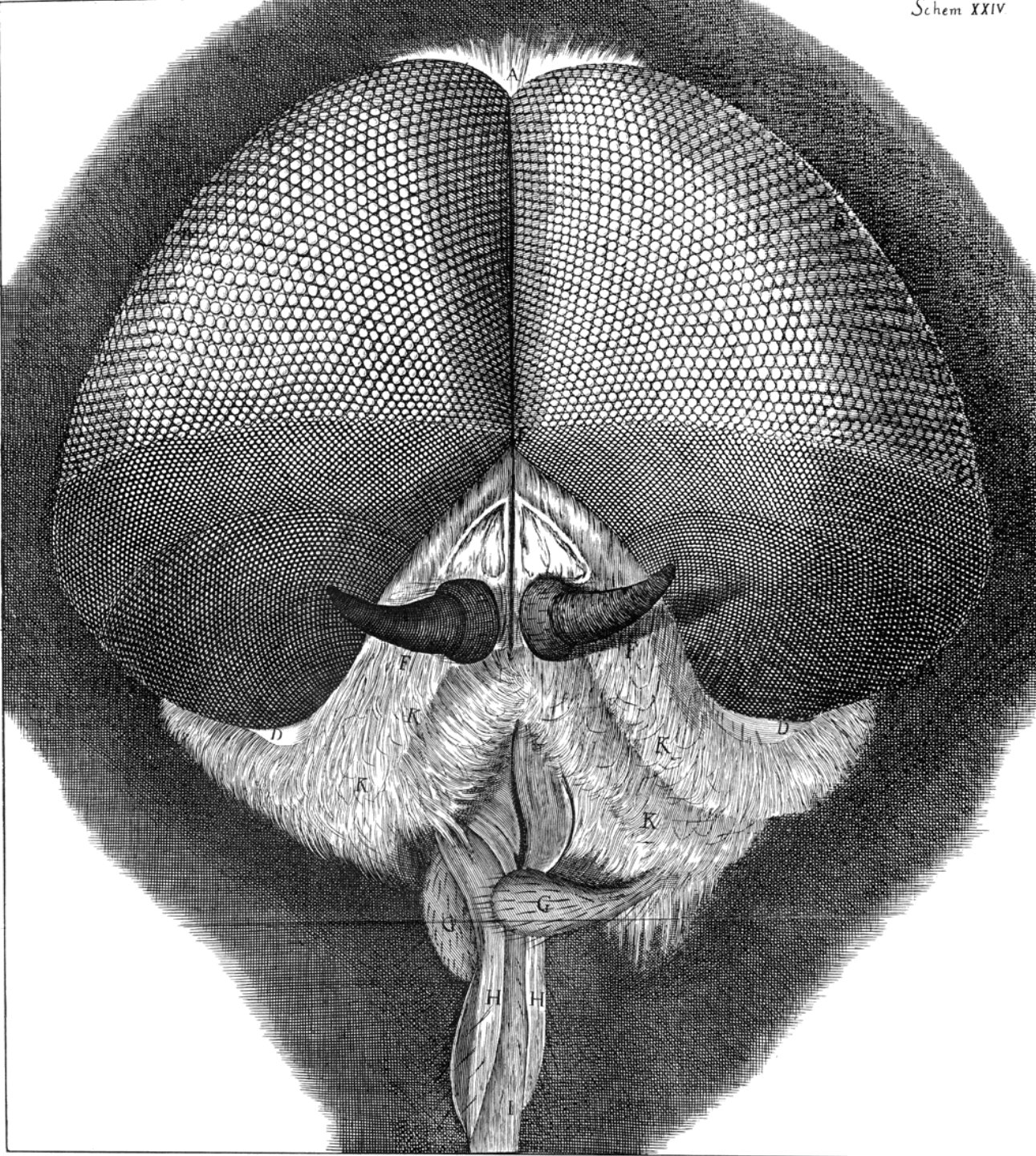


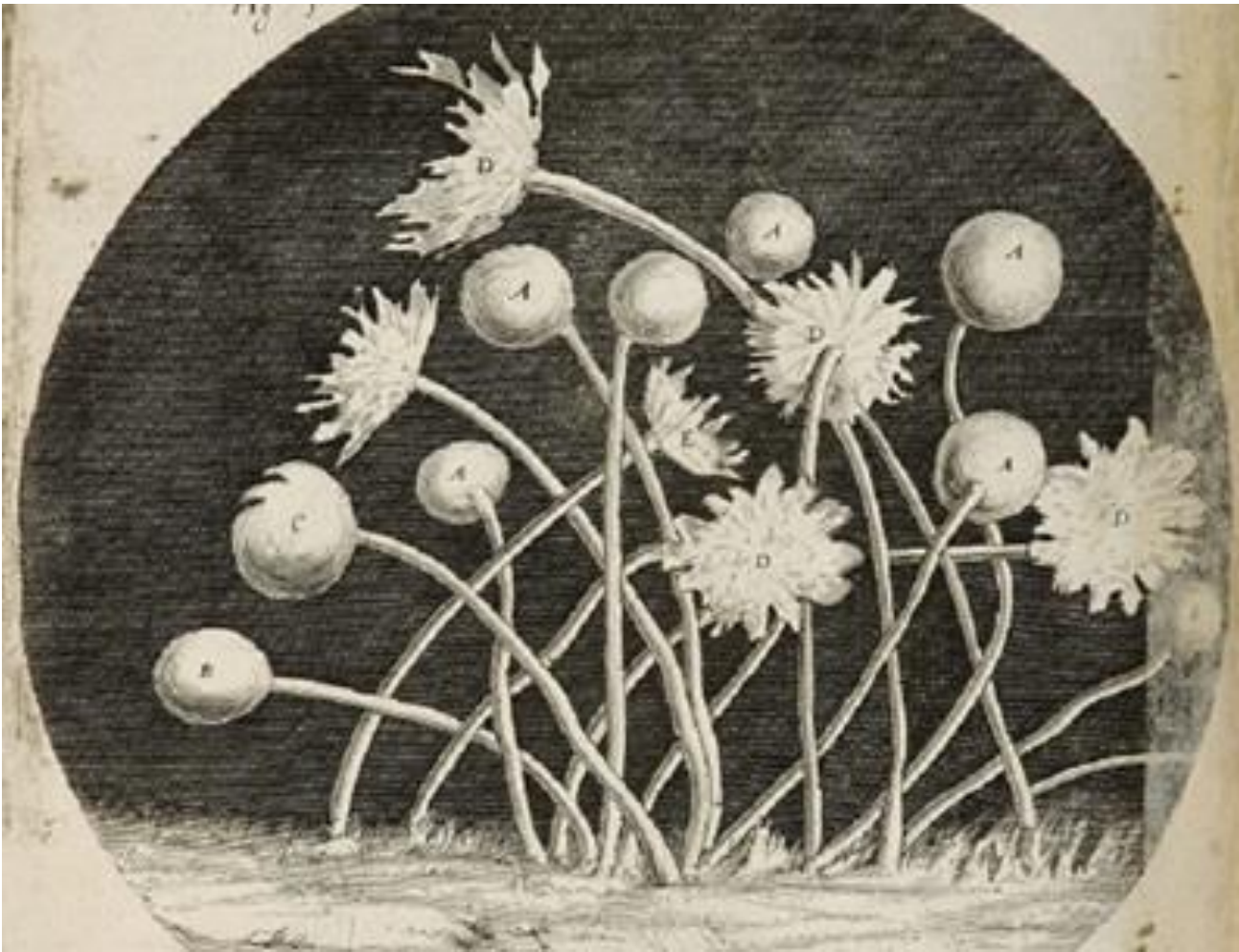
NETTLE SPINES

Most of the
drawings are
done by Hooke
himself, unlike
Vesalius who
hired artists



GREY DRONEFLY FACE





MOULD

Notice how it is drawn in a circle to allow people to imagine they are looking down the microscope themselves.

This was as a reminder that the images were of objects under a microscope.



SILK THREADS

Notice the different
levels of
magnification, and
again the circular
reminders of the
lens...

Fig:1



Fig:3

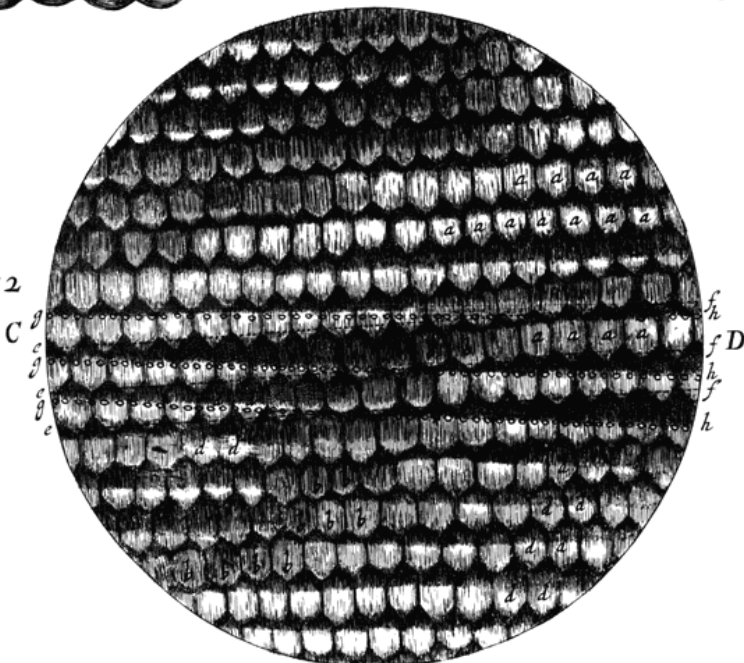


Fig:4



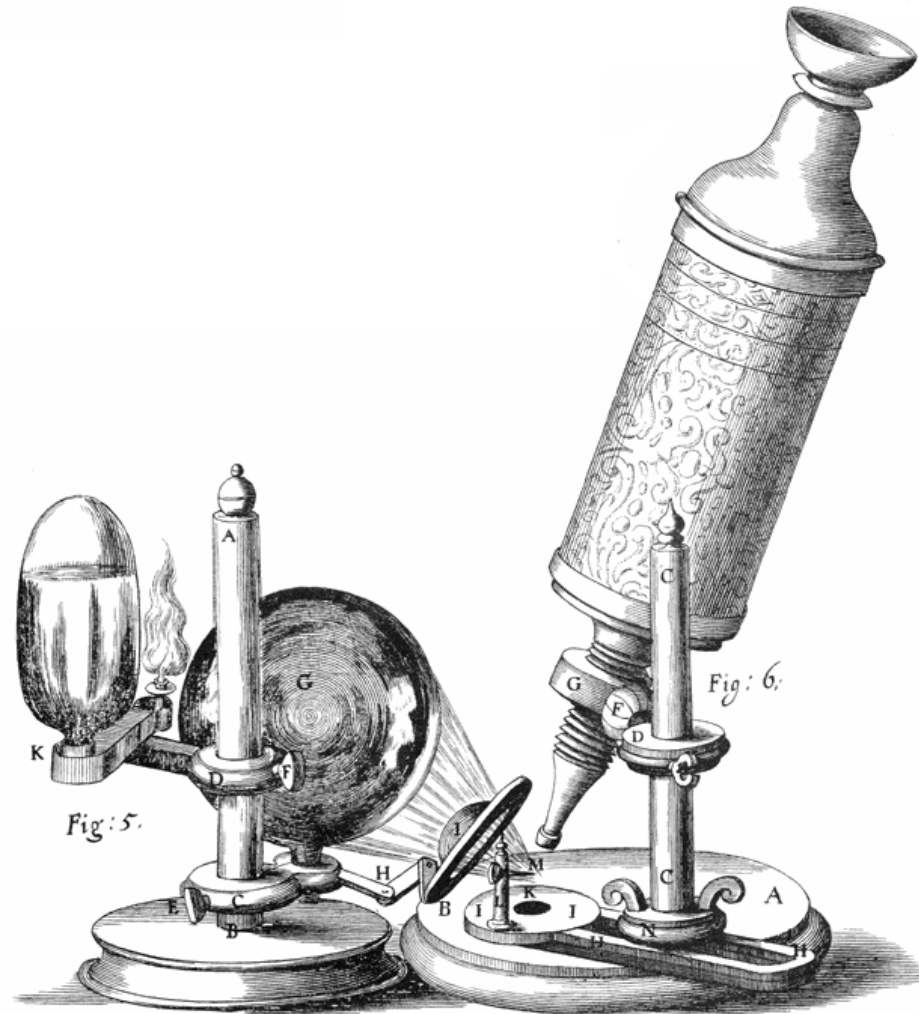
A

Fig:2



A KEY TECHNOLOGY: THE MICROSCOPE

- This is an image of the microscope Hooke used.
- It allowed people to discover new things that were invisible to the naked eye.
- It also forced the Catholic Church to accept that because the Bible was written before the microscope was invented it couldn't possibly explain everything in the world.



FACTS OF THE DAY – WHAT **ELSE** DID HOOKE DO?

- **Clocks:** first to create reliable pocket watches
- **Gravity** – first person to use gravity to explain not just why we stick to Earth, but also orbits of the planets and moons – lots of letters with Newton **before** he published his theories... ...could possibly deserve the credit?
- **Palaeontology** – first person to accurately identify what a fossil was and suggest there had been mass extinctions
- **Astronomy** - one of the first people to describe the rings of Saturn
- **Human memory** – first to scientifically start to understand memory
- **Incredible architect** – helped rebuild the City of London after the Great Fire with Sir Christopher Wren



WHAT WERE THE LONG-TERM CONSEQUENCES OF HOOKE'S WORK?

- Think, pair, share
- Write a PEE paragraphs that explains the consequences of Hooke's work.
- If you can link it to science, beliefs and ideas today



ROBERT HOOKE: AN ENGLISH LEONARDO?

Does he deserve the title of “England’s Leonardo?”

This interpretation of him comes from the historian Allan Chapman.

The term “Renaissance Man” is often used to describe Leonardo – this means someone who is very multi-talented in areas like science, art, and languages

Who was Leonardo da Vinci?

Very famous, multi-talented thinker.

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