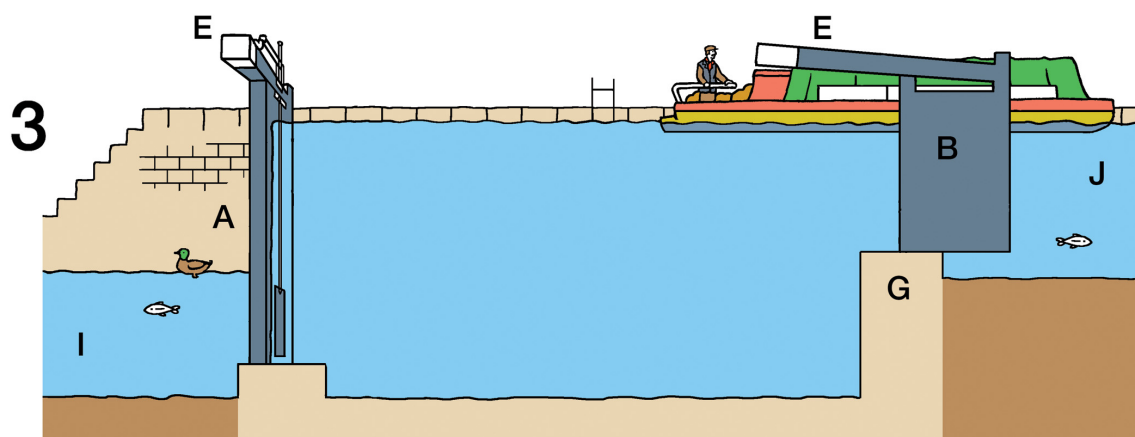
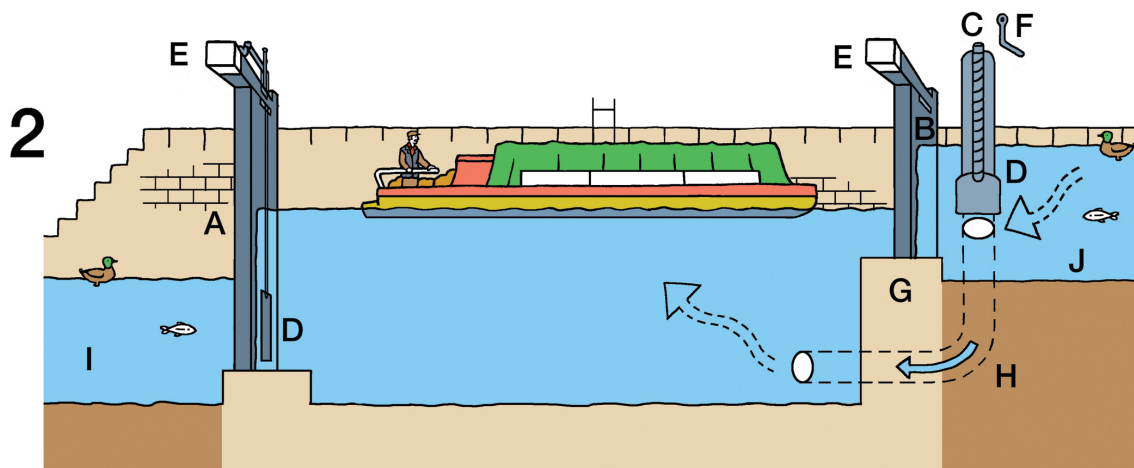
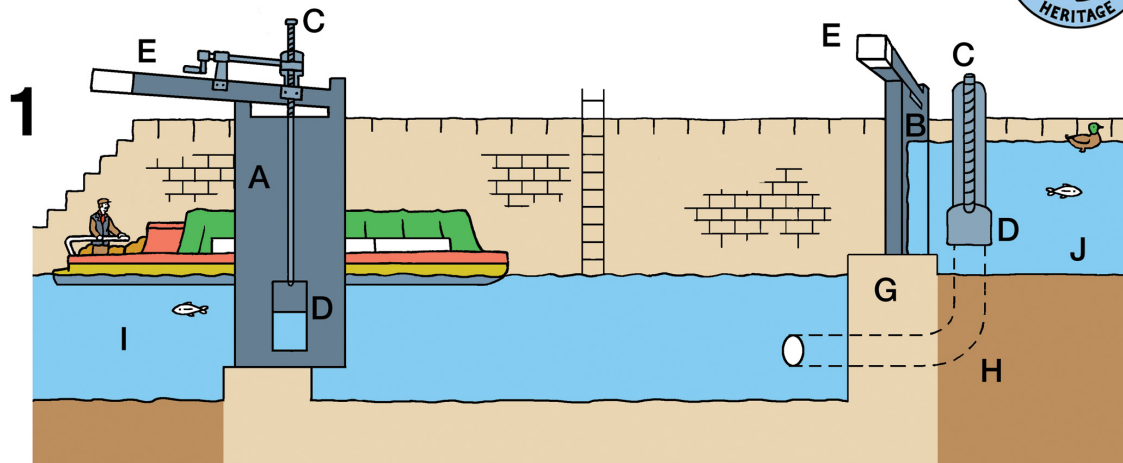


HOW THE LOCK WORKS



A. Bottom Lock Gates
 B. Top Lock Gates
 C. Winding Mechanism or Paddle Gear
 D. Paddles
 E. Balance Beams

F. Windlass or Lock Key
 G. Cill
 H. Underground Pipes
 I. Canal Downstream
 J. Canal Upstream

HOW THE LOCKS WORK



Salmon Lane Lock



Sturt's Lock

In Summary:

- Water from the canal upstream fills up the lock through an **Underground Pipe** in the side of the canal.
- Water empties from the lock into the **Canal Downstream** through the holes in the bottom gates.
- **Paddles** cover the holes that let the water into or out of the lock.
- **Paddles** are raised or dropped using a **Windlass** or Lock Key to turn the **Winding Mechanism or Paddle Gear**.
- The **Lock Gates** are opened or closed by pulling/pushing on the **Balance Beam**. It is impossible to open the gates until the water level is the same on both sides of the gates.

In Detail:

The illustration shows the journey from downstream to upstream. It is reversed when going the opposite way.

FIG 1

- Raise or wind up the paddles in each of the bottom gates so water flows out and the lock is 'empty'.
- Open the bottom gates, which have a pivot on the base, by pushing the Balance Beam.
- Drive boat in.

FIG 2

- Close the bottom gates.
- Drop or wind down the paddles to shut holes in bottom gates.
- Raise top paddles in the canal bank to open the holes into the pipes either side.
- Water flows through the underground pipes into the lock so the boat floats up.

FIG 3

- Wait until the water level is the same both sides of the top gates.
- Open the top gate. It is *impossible* to do this until the water levels are the same due to the pressure of the water !
- Drive the boat out.
- Drop/wind down the side paddles to shut off the pipe.