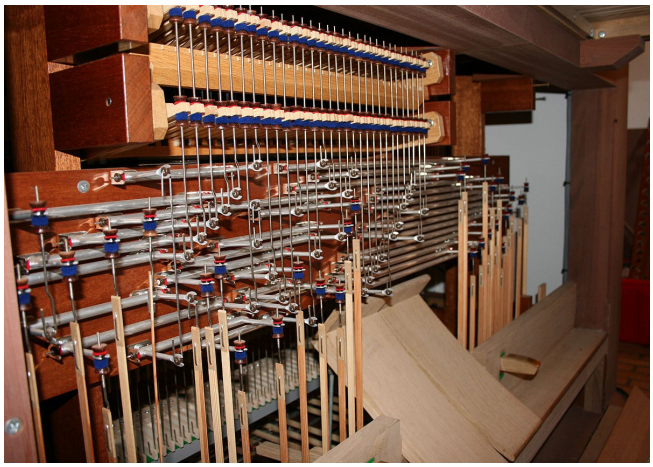
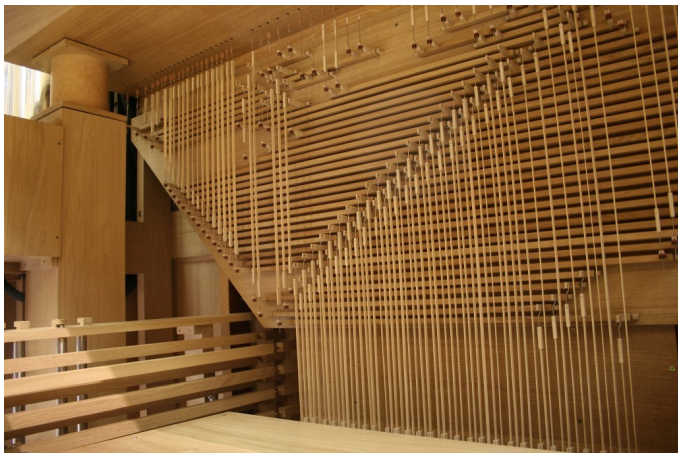
Mechanical (Tracker) Action Organs

The *mechanical* a.k.a. *tracker* key action is the oldest type of key action still in use in many organs today. It is called tracker action because it utilizes mechanical connections that tracks from the keys on the console to the valves (or pallets) under the pipes. This action requires lengths of trackers and roller bars to distribute the action to the proper pipe. The console of a tracker organ must be close to the pipework for the key action to remain light, tight, and responsive.



Looking behind the mechanical/tracker action



Mechanical/Tracker action in large tracker organs can be very complicated!

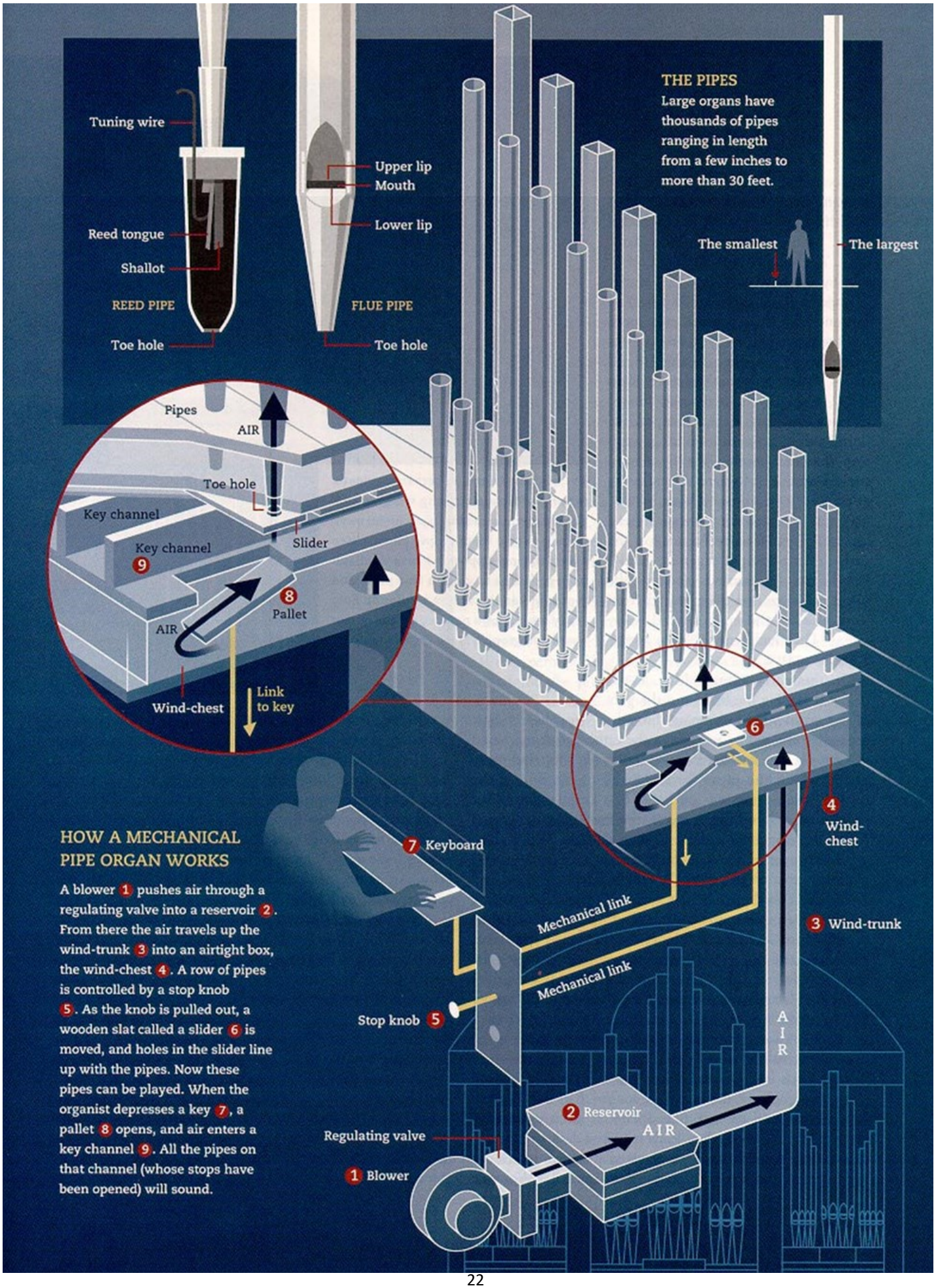
Many times, though not always, tracker organ consoles are built right into the organ casework and pipes! If the console is detached from the casework and pipes, it must be very close in order for the mechanical action to work properly.

Notice keyboards are recessed into organ case

Key desk on the side, but still close to pipes and chests.

Dobson tracker organ St. John United Methodist Church Augusta, Ga.

Here is the console of a Lynn Dobson tracker organ in Augusta, Ga. Notice the console is not built directly into the casework and pipes. In this instance, the trackers connect to the pipes from the rear of the console, under the floor.


Tuning wire
Reed tongue
Shallot
REED PIPE
Toe hole
Upper lip
Mouth
Lower lip
FLUE PIPE
Toe hole
THE PIPES
Large organs have thousands of pipes ranging in length from a few inches to more than 30 feet.
The smallest
The largest
Pipes
AIR
Toe hole
Key channel
Key channel
9
Slider
8
Pallet
AIR
Wind-chest
Link to key
6
4
Wind-chest
7 Keyboard
Mechanical link
Mechanical link
3 Wind-trunk
Stop knob 5
A I R
2 Reservoir
A I R
Regulating valve
1 Blower
HOW A MECHANICAL PIPE ORGAN WORKS
A blower 1 pushes air through a regulating valve into a reservoir 2. From there the air travels up the wind-trunk 3 into an airtight box, the wind-chest 4. A row of pipes is controlled by a stop knob 5. As the knob is pulled out, a wooden slat called a slider 6 is moved, and holes in the slider line up with the pipes. Now these pipes can be played. When the organist depresses a key 7, a pallet 8 opens, and air enters a key channel 9. All the pipes on that channel (whose stops have been opened) will sound.