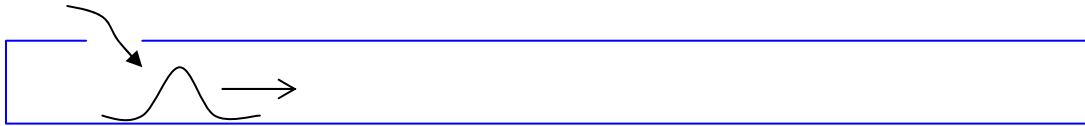


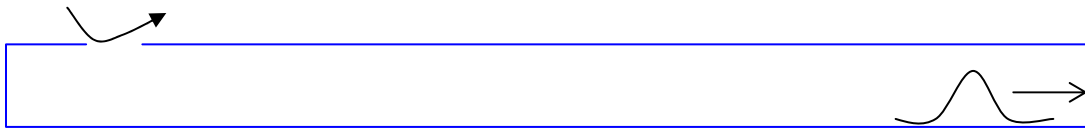
Final Topics

- Getting tubes to make the right pitches.
- Causing tubes to vibrate
- fine tuning and special techniques
- The case of string instruments – an outline.

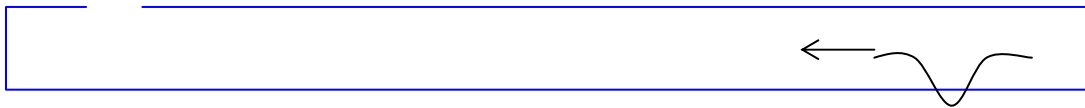
Pulse Movement in Flute



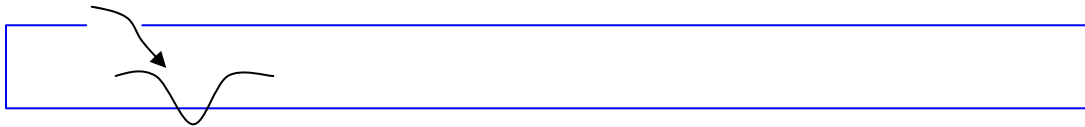
blow in: high pressure pulse



high p pushes out airstream.
pulse moves down tube



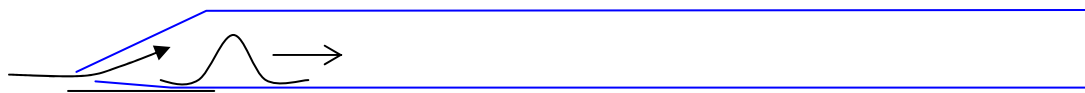
pulse inverts on reflection



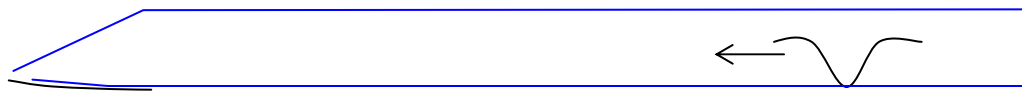
low p sucks airstream back in,
cycle starts over

Pulse Movement in Reed/Brass

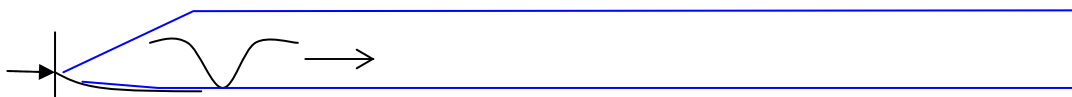
(More detail in Rossing Fig. 12.2, concept discussed in Section 11.3)



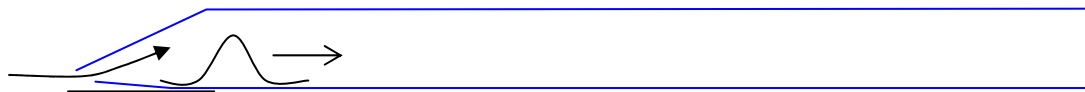
blow in: high pressure pulse



pulse inverts on reflection



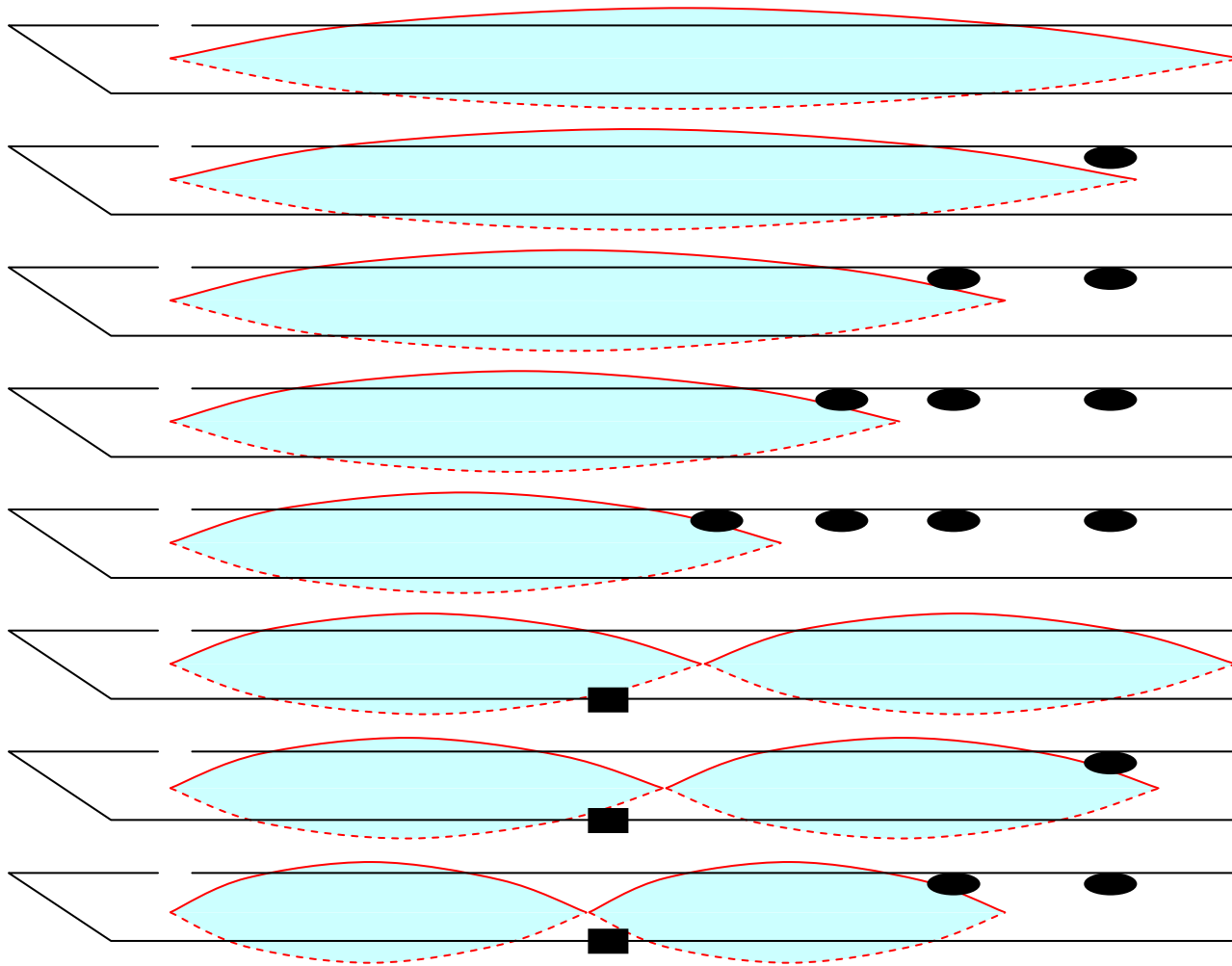
low p sucks reed shut. Pulse stays upright on reflection



high p opens reed, pulse is reinforced, and cycle repeats

Register Holes

(Rossing Fig. 12.12 shows how this works slightly differently for a clarinet.)



Tone holes shown as round

Register hole shown as rectangle