

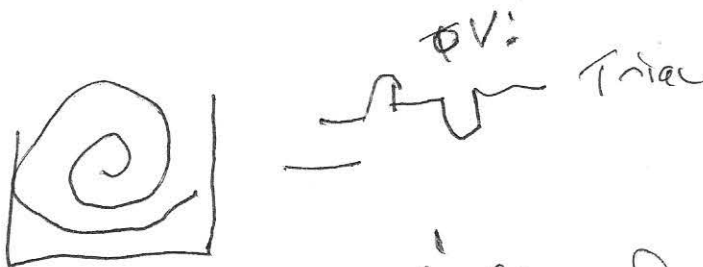
No viable power sources

A. Electric heating element

Pro: easy to control (TRIAC)
quantitative (one can control eggs precisely)

Con: thermal inertia @

Adjustment: add quenching system



B

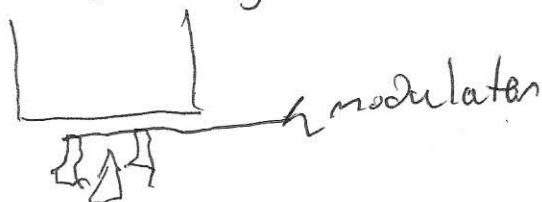
Direct natural gas heat. (ie from stove)

Pro: technically easy (may be controlled with a servo)

many variations in configuration possible

(i.e. direct gas flame on container; indirect heat through heat plate, indirect heat through heated air)

Con: minimum heat ~~input~~ rate, restart is tricky due to problem of ignition



C. Steam bath (use boiling water as energy transmitter.)

Pro: Non toxic, source of steam has many variations possible.

Heat capacity of water is very high
Easier to quantify by moderating flow rate, heat temperature of steam.

Con: Risk of burning cook. Requires control of air flow precisely.
Added variable of heat conduction from steam to contents of pan.

C'. Have heating of steam go through several stages - liquid to vapor, vapor heating, vapor flow rate to pan

Con: adding heat at $< 100^{\circ}\text{C}$ is complicated

C'' Allow steam to bubble through material water would be added to product.

C''' Control pressure in vessel to control steam temperature. Con - very sophisticated hardware needed

D. Allow all methods A-C be available at the same time