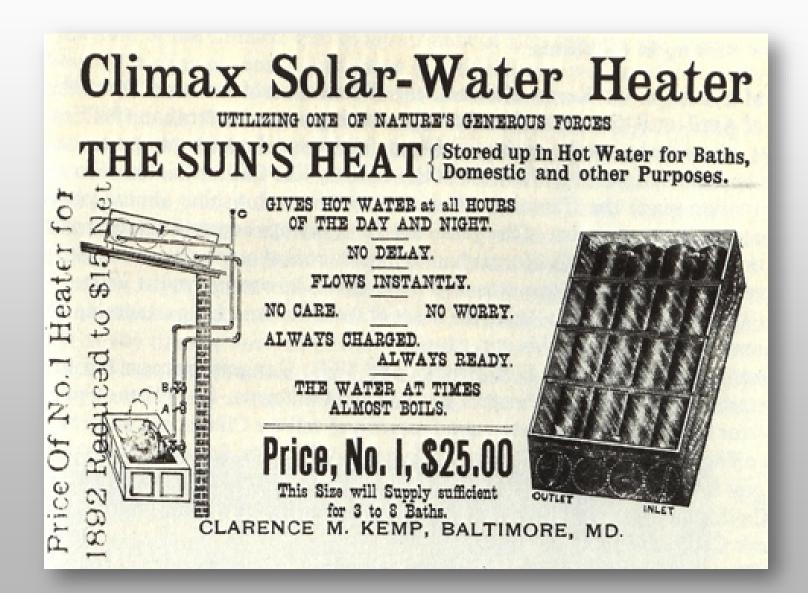
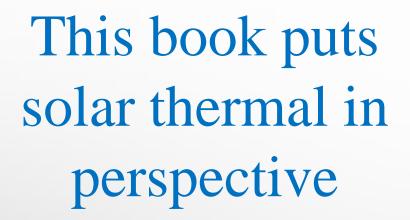
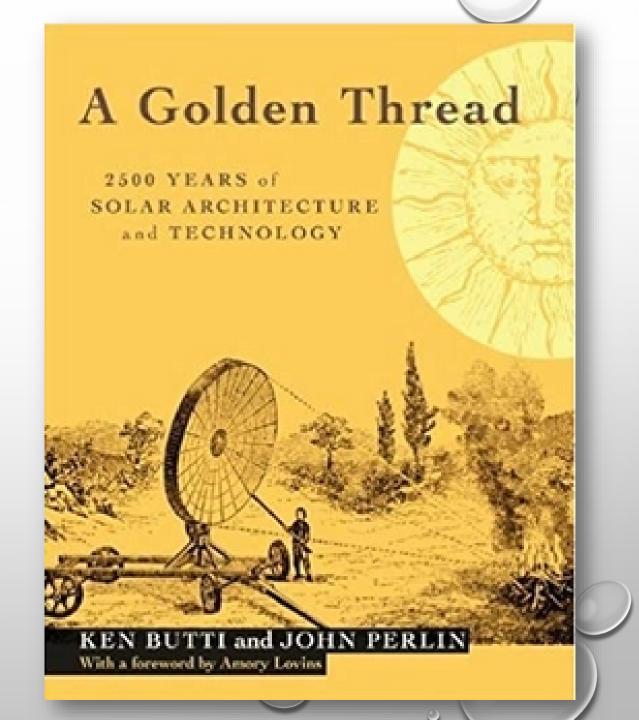
#### A BRIEF HISTORY OF SOLAR HOT WATER

Simple batch heater



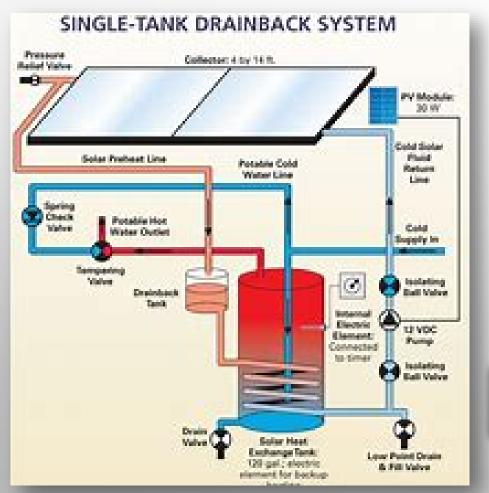


Find it at www.addall.com

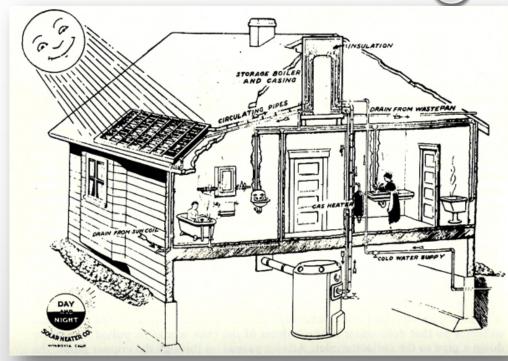


### Solar heating comes and goes...

Solar from the 1920s, stopped by cheap gas.







Solar from the 1980s, stopped by the end of tax credits.



I was around for the second solar thermal collapse, and for years took care of many orphaned systems.

#### What I learned:

- Simple lasts while complex doesn't
- Designers and installers had little training
- Any big component failure killed the system
- Efficiency often did more than solar
- The system must be matched to the occupants



# And the Next Threat to Solar Thermal???









But is it really either - or?

Some promote PV + HP as better than thermal. I see them as different ways of getting the job done. It's bad practice to build yourself up by putting someone else down.

It makes everybody looks bad.





## How do we make solar thermal attractive for the long term?

- Sell based on life-cycle cost
- Bring the price down
- Have trained, experienced installers
- Keep the systems simple
- Promote the benefits of solar, like:

Reduced grid dependence
Reduced monthly cost
Good ROI
Bragging rights?



## Larry Weingarten.com

## in hot water

PO Box 928, Monterey CA 93942

831-402-0490

eleent@startmail.com

