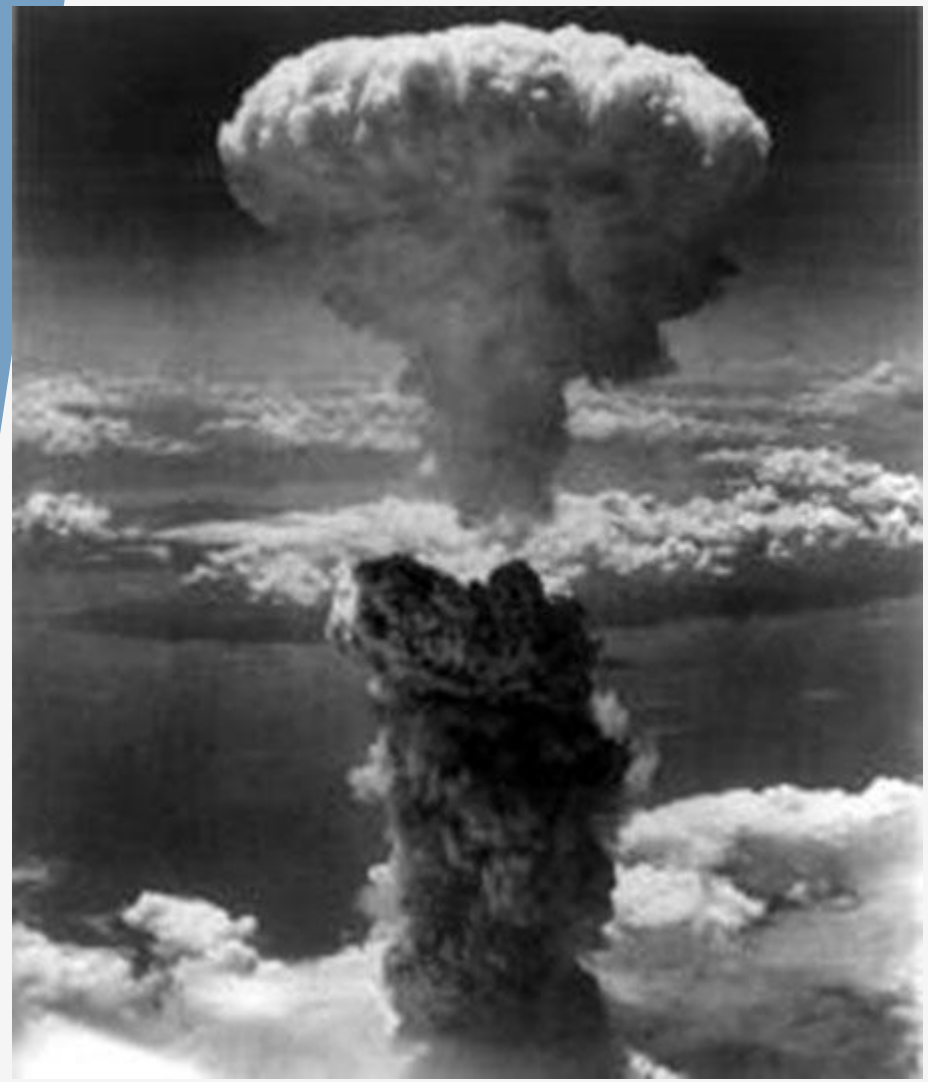
Ethics in Engineering



AT LAST! AT LAST!

A Perfectly Reliable Acoustic Telephone.

A TELEPHONE THAT WILL WORK WELL OVER ANY ROUTE, REGARDLESS OF ANGLES.

A TELEPHONE THAT WILL WORK WELL IN ALL KINDS OF WEATHER, WIND OR RAIN.

A TELEPHONE THAT DOES NOT ROAR WHEN THE WIND BLOWS.

A TELEPHONE THAT WILL ADMIT OF SEVERAL INSTRUMENTS UPON THE SAME TRUNK LINE.

An Acoustic Telephone Central Office,

Adapted to switch one line with another, similar in effect to the electric system. This is attained by the SHAVER SYSTEM, and its practical utility demonstrated by its use by over 150 bona fide subscribers in New York City, who are paying rentals of $2 to $8 per month for the service.

TELEPHONES sold outright or rented in unoccupied territory. Send stamp for list of users and testimonials. It will pay you to investigate the truth of these statements, and secure an agency. Liberal discounts to agents, and satisfaction guaranteed or money returned. References.

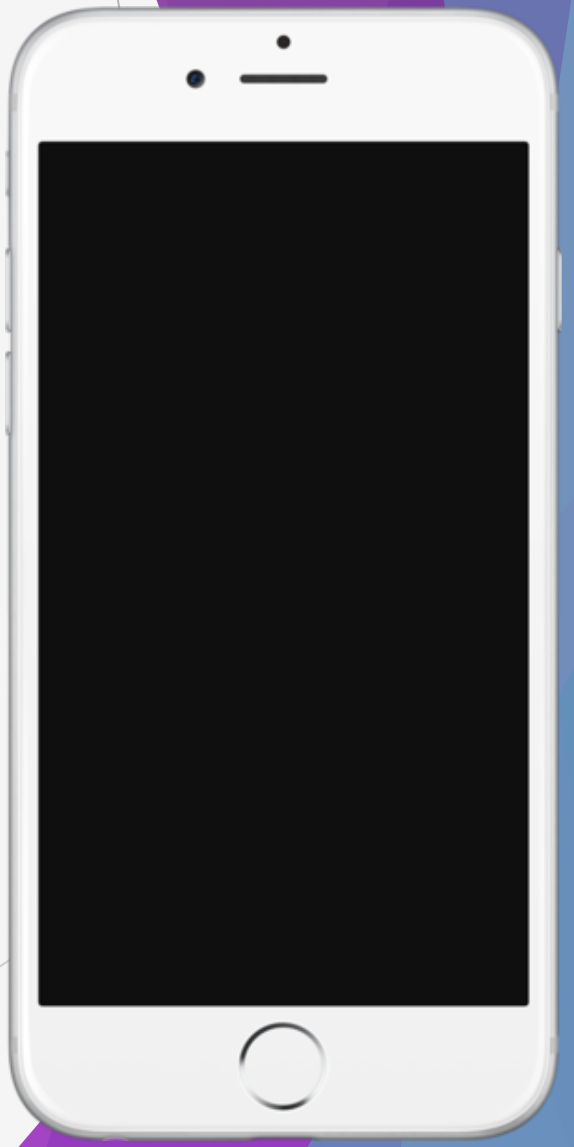
To rapidly introduce our goods, we will, for the first line in any town, give a discount of sixty per cent. from our regular retail prices for Telephones, as given below, providing the purchaser will endeavor to secure us a reliable agent.

Retail prices Telephones each	$10.00
Magneto Call Bells (not necessary)	6.00
Wire per 100 feet	.25
Hangers for right angles	.25
Ordinary supports	.10

The SHAVER SYSTEM of Telephony has been in use by many business houses in this city for the past two years, gives universal satisfaction, and we cheerfully recommend it to those desiring such service.
—FRANK LESLIE'S PUBLISHING HOUSE.

THE CONSOLIDATED TELEPHONE CO.,

Jersey City, N. J.



Day 2 Goals

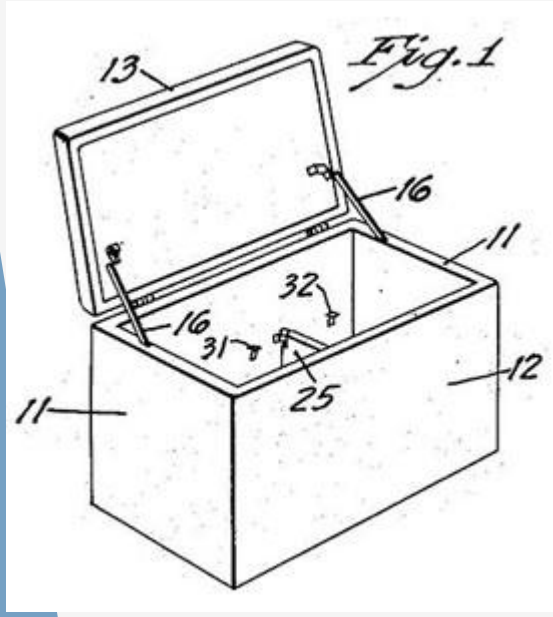
- Review main ethical evaluation ideas:
  - For whom are the designs intended to benefit?
  - On whom have the designs been tested?
- Develop an alternative design based on one of the inventions we read about
- Present your new and improved design to the class

Ethics in Engineering

- Who does the product really benefit?
- How does it benefit them?

Consider these new innovations…

A ring that alerts its wearer to texts, phone calls, emails and alerts



A cooler that charges cell phones and mixes drinks

Nutritionally supercharged bananas

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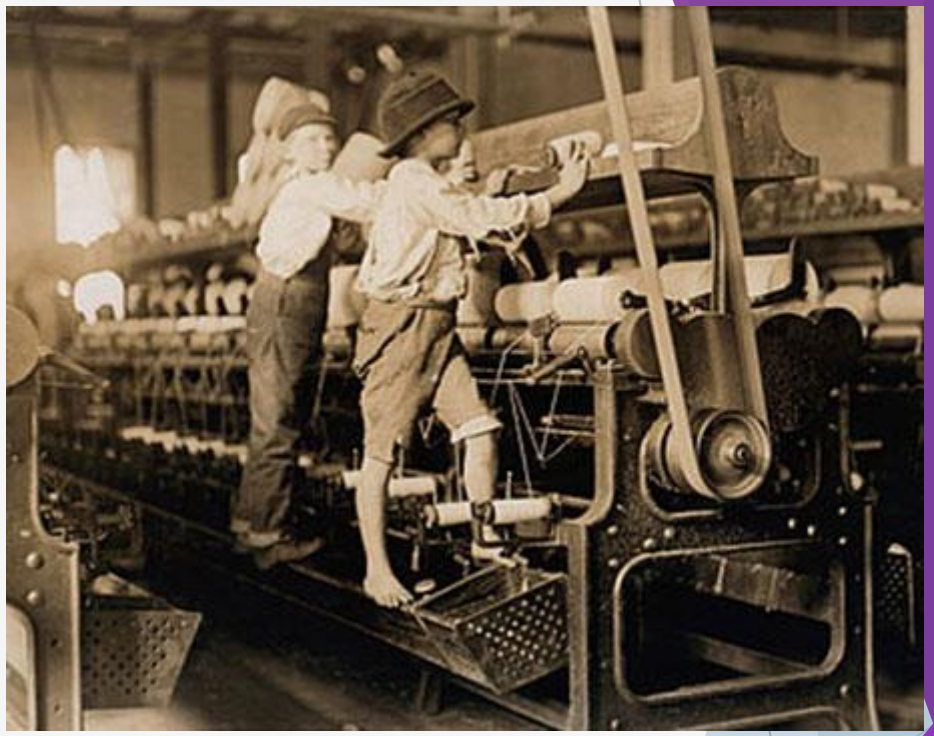
- How are the products developed and tested?
- Who makes the products?



Above: Children work in a factory before the passage of child labor laws.

Left: Prisoners in Nazi concentration camps, many of them children, were forced to undergo medical experiments.

It’s your turn to innovate!

- You are engineers who will pitch your design to a charitable foundation that is looking for new projects to fund.
- Try to imagine affordable ways to repurpose everyday things!
- Make your re-imagined product as ethical as possible—meaning it should do the most good for the most people with the least harm to people and the environment
- Try to encourage and persuade the foundation to invest in your design.

Imagine innovations like these!

Chewing gum that kills bacteria is an affordable way to improve dental hygiene.

Vaccines have become more affordable and accessible to people all around the world.

Example: Vista (Redesigned "Blue Room")

1. What ideas do you have for modifying an existing design to make it more ethical?

   I would take the "Blue Room" and modify it so it could be used for people who are confined to a bed and who cannot get up. I would especially want to use it for people who do not have nearby family. The projector would be the same, but hospice workers could upload photographs or compiled images of the confined person's favorite places. For instance, if the person liked the desert, the projector could show desert images and sounds. These images could be interspersed with images of the person's family and favorite celebrities or other interests.

2. What problem(s) can your design solve?

   People become depressed when they cannot go outside or see people they love. This may help to alleviate people's depression or sadness by giving them visual reminders of places and people they love.

3. On whom will you test your design? How will you test your design?

   I would first use the prototype with people who are not cognitively impaired, but who are physically impaired and confined to their beds in high-traffic hospitals in the U.S., China, India and Africa. I would try the projector with elderly males and females and interview them to find out if they liked the projector and how they would improve it.

VISTA:
The Next Best Thing to the Real Thing ™