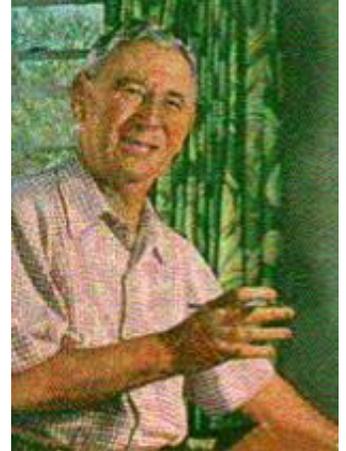
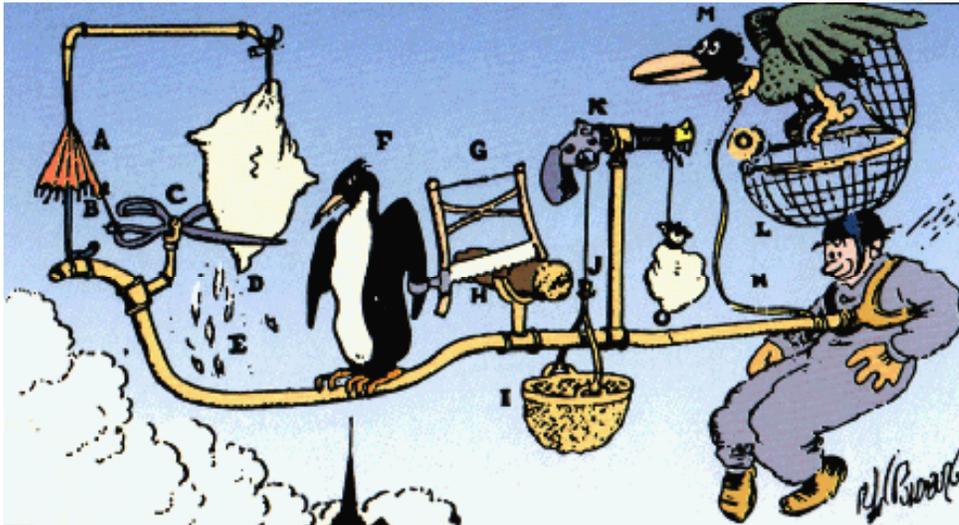


Title: Rube Goldberg Project**Introduction:**

Rube Goldberg was an artist, inventor, engineer, author and sculptor. He is best known for his comical drawings of crazy contraptions and inventions. His artwork appeared in newspapers throughout the United States from the early 1900's to the 1960's. Today, the term Rube Goldberg is used to signify anything done in an overly complicated or round-about manner.

Rube Goldberg's cartoons are incredible displays of ingenuity, detailed logic, physics and satire. He poked fun at the many complicated inventions that were available at the beginning of the century, and at the round-about methods people devised for solving their problems.

**Automatic Parachute Opener**

Materials: You can use anything you have available at home. If you bring things from home, it is your responsibility to take them back home. They will not be stored forever.

Procedures:

1. You may work alone or with a partner.
2. You must submit a 1 page picture of your device. It must include a written description of each type of simple machine being used.

3. The machine must contain **a minimum of 5 steps. There must be 2 different types of simple machines.**
4. Final projects must be brought to school or filmed. You may video tape on VSH tape, DVD, CD or computer files.
5. If you bring your project to school, it can be no larger than 2 ft x 2 ft x 2 ft. If you film the project, it can be any size.
6. You may choose the purpose of the machine or choose from this list of tasks:
 - a. fill a cup with water
 - b. put toothpaste on a toothbrush
 - c. pop a balloon
 - d. crush a grape

7. This project is due: _____

Scoring Rubric:

Requirement	0	1	2	3
Picture shows steps and explanations of steps				
Project has at least 5 steps				
Project uses at least 2 machines				
Project accomplishes the task				
Project is brought to school or video taped in action.				