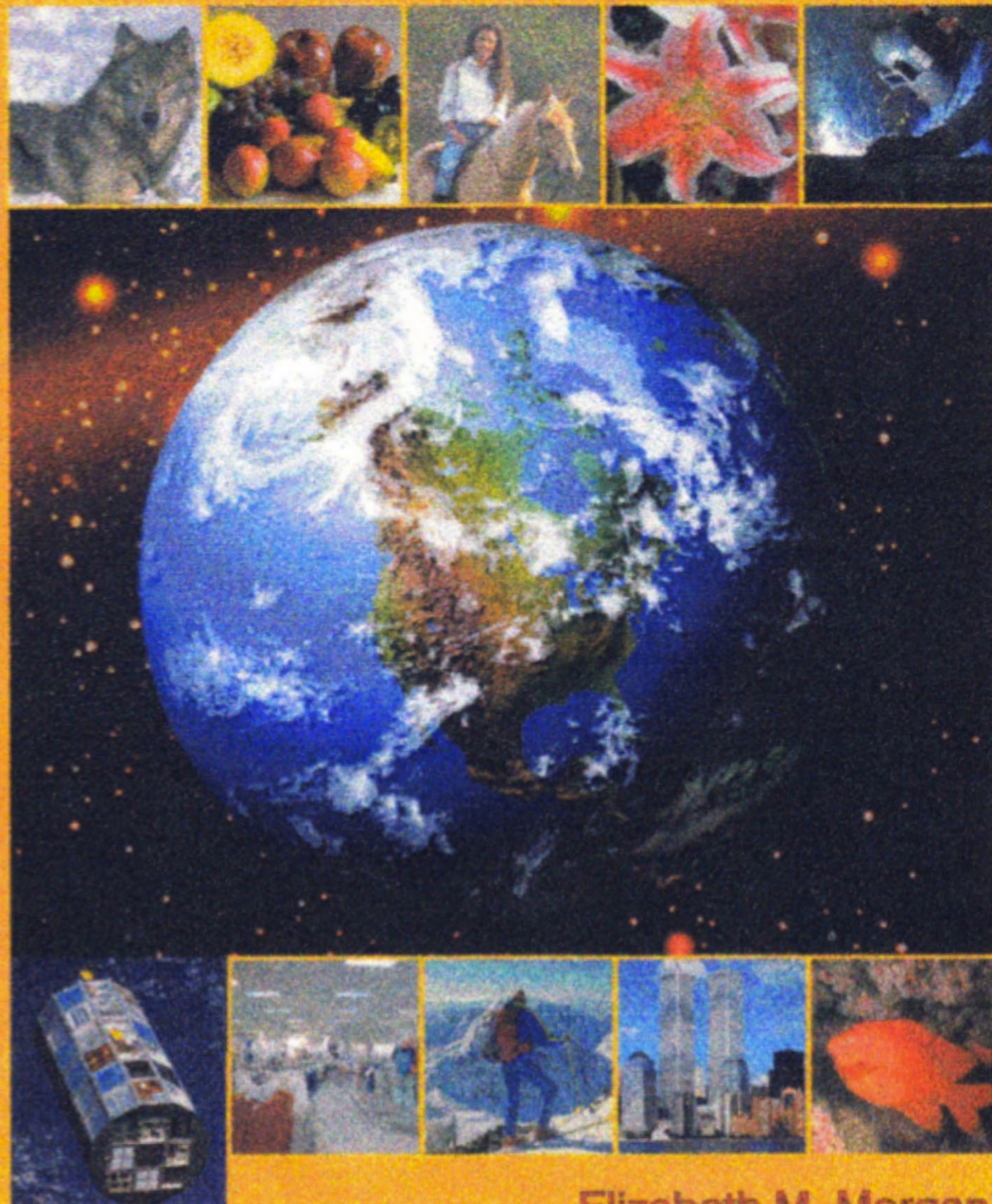


AGRI SCIENCE EXPLORATIONS



IST 

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PRODUCTS

New products often undergo a large amount of testing. How a product is tested depends on what it is or does. The product is carefully tested under controlled conditions.

New chemicals to use on crops must be tested over several years. Application to make the chemical for a particular use is submitted to the government. Gaining approval to use it is a long process. Much information is needed showing that the product will not harm the environment.

New machinery involves developing a prototype of the new item. A **prototype** is the original model tested. It becomes the pattern for making future models. The prototype is carefully tested under field conditions. Changes in design are made based on field test results. For example, if the steel frame for a new implement fails, a stronger steel frame is used.

After testing, a manufacturer begins production. Methods are used to efficiently make the product. People must know about and buy the new product. This is when marketing becomes important. Most agribusinesses use marketing specialists to help get people to use their products.

Getting farmers and others to buy and use a new product is often a challenge. Marketing is important. Education is needed. Books and magazines have information on the product. Meetings are held to promote the product. Field demonstrations are used.



2-14. The prototype of a planting system developed by design engineer Frank Faulring of New York is being field tested. This machine transplants growing plants through plastic. The machine burns small holes in the plastic, sets the seedling, presses the soil around the seedling, and waters the planted seedling—all in one operation. (Courtesy, Renaldo Sales and Service, Inc.)