

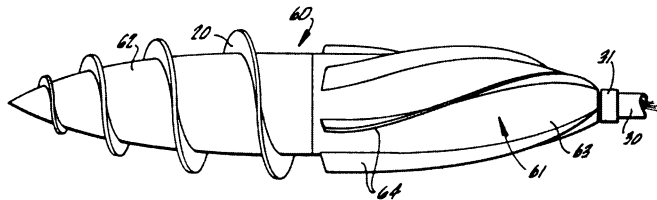
current patents

TECHNOLOGY

Burrowing apparatus

The classic mole machine of Jules Verne and many writers since has been patented by Ronald F. Scott and George M. Hotz of Altadena, Calif., and Earle A. Howard of La Canada, Calif.

The underground drill has two revolving halves that



mesh with each other as they turn. The forward portion has screw-like flanges for burrowing through the soil. The displaced material is caught by helical fins.

The soil penetrometer is self-propelled by an electric motor, and is also equipped with sensors for steering.

Patent 3,375,885

PHOTOGRAPHY

Reversibly polarized film

A photographic film whose opposite surfaces are treated so that one gives a positive image and the other a negative image of the same data is the invention of Alvin A. Snaper of Burbank, Calif.

The film is expected to have wide use in information storage and retrieval and data processing. One surface of the film is processed so that it will respond to one form of polarized light, giving a negative image of the data recorded; the other is processed to respond to another form of polarized light to present a positive image.

This is accomplished by pre-stressing the opposite surfaces differently. The surfaces are then dyed, the combination of dye and stress acting to produce differently polarized surfaces.

Patent 3,376,135

CONTRACEPTION

Sterile packaging for IUD

One of the recommendations emphasized in a report to the Food and Drug Administration on intrauterine devices, or IUD's, was the need for sterility at all times before and during insertion. (SN: 2/3 p. 112)

George S. Rosenthal of Deseret Pharmaceutical Company, Salt Lake City, Utah, has patented a method for packaging IUD's that keeps them sterile until delivered to the physician. The FDA committee found that when sterile conditions were maintained until this point, bacterial control was adequate.

370/science news/vol. 93/20 april 1968

The only major company using the method, Saf-T-Coil, has assigned marketing rights to Julius Schmidt, Inc., of New York.

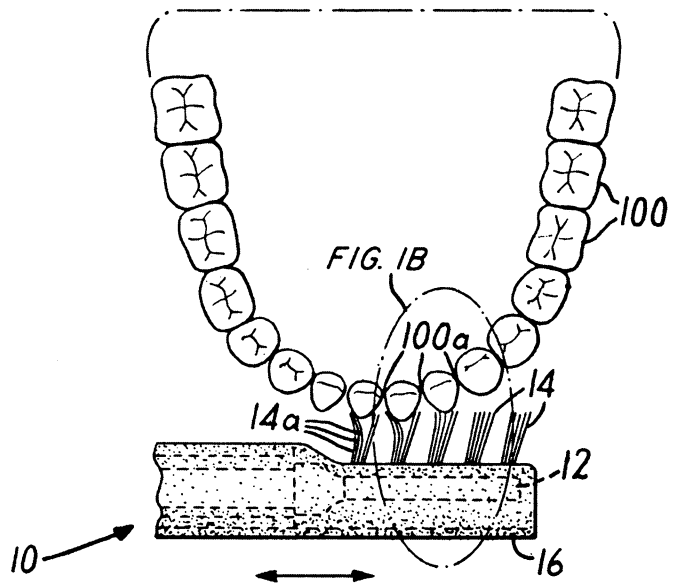
Patent 3,374,788

DENTAL HYGIENE

Ultrasonic cleaning method

An ultrasonic teeth cleaning apparatus for home use has been devised to provide the type of cleaning usually available only in the dentist's office.

Arthur Kuris and Lewis Balamuth of New York assigned rights to Cavitron Corporation, New York. As



with electric toothbrushes, it has replaceable heads so that a single power unit can be used by all members of a family.

A typical ultrasonically driven toothbrush, according to the invention, would have a bristle stroke of about one-thousandth of an inch and would operate at a frequency of 20,000 cycles per second. This gives a peak velocity at the bristle tips of approximately five feet per second, with the distance traveled by the bristle tip being about 20 inches per second.

Patent 3,375,820

HEALTH PHYSICS

Thermoluminescent dosimetry system

A dosimeter that can measure radiation exposure over a range between five-thousandths of a roentgen to 5,000 roentgens, has been patented.

David F. Rutland and Ernest F. Blase of Santa Barbara, Calif., and Richard C. Palmer of Goleta, Calif., assigned rights to their thermoluminescent dosimetry system to EG&G, Inc., a Massachusetts corporation.

Patent 3,376,416