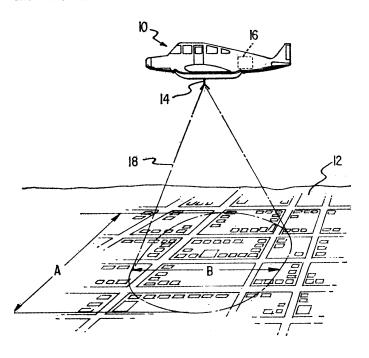
## **Current Patents**

BROADCASTING



#### Aerial Audience Survey System

A way to make fast, comprehensive surveys of TV viewing without telephoning the viewer or touching his set-by measuring the signals put out by television receivers themselves—received Patent No. 3,299,355 last week. The new method, which uses an airplane-mounted receiver, has been undergoing testing and should be ready to market within 60 days, according to one of the inventors, Arthur E. Jenks.

The system is based on the fact that each receiver, in processing an incoming signal from the broadcasting station, generates a small signal of its own. This signal varies depending on the station the receiver is tuned to. Although the Federal Communications Commission requires manufacturers to keep such signals within very low limits, the signal strength allowed is still enough to be detected by proper equipment.

The principle of using receiver output signals to determine what stations are being tuned in was used several years ago in a system which employed a mobile truck unit. Although it attracted a lot of attention, the landbased system did not work out because it was too slow and because of too much interference.

The aerial method, according to the new patent, overcomes these difficulties. With an airborne monitor, an area of 190 square miles, or more than a million TV sets in a heavily populated area, could be covered in any 30-minute period. Since TV receiver signals are strongest in the area directly above the set, the monitoring equipment is able to analyze them more effectively in the air than on the ground. In addition, interference caused by signals bouncing off neighboring buildings, the same type of interference that causes ghosts in TV picture reception, is eliminated.

Jenks and co-inventor David W. Ginn assigned rights to the patent to Television Audit Corp. of Winter Park,

# New Ideas and Gadgets

New Ideas and Gadgets is an editorial service to readers; more information on items can be secured from the manufacturers.

#### Wide-Angle Lens

Suitable for taking pictures in confined areas, interiors and narrow streets, the wide-angle f/5.6 lens covers a large image circle and allows use of its full diameter without loss of quality. The lens also permits higher speeds with shorter exposures and a much brighter image.

Burleigh Brooks Inc., 420 Grand Ave., Englewood, N.J.

#### **Electrolytic Polisher**

Suitable for smaller metalographic laboratories and technical schools, the polisher is designed so that the polishing current can be set before the polishing starts. The unit, made from acid resistant polyvinyl chloride and stainless steel, consists of a control unit and a polishing table. The polishing area is three millimeters square.

William J. Hacker Co., Inc., P.O., Box 646, W. Caldwell, N.J. 07006

### Anti-Shoplifting Device

A new security system for protecting stores against shoplifting combines a tiny pellet that can be concealed in the merchandise with an electronic control center. Science News / Vol. 91 / 28 January 1967

When a piece of stolen goods containing the pellet comes within range of the electrical field of the control center, either a silent or audible alarm is set off alerting the store detective. The system is available on a sale or lease basis.

Continental Telephone Supply Co. Inc., 49 West 46th St., New York, N.Y.

#### Soldering Tool

The easy-to-use soldering tool is operated by resistance heating and has a point consisting of two closely spaced electrodes. No heat is generated in the tip of the iron until it is touched to the work and completes a circuit, when the highly resistant carbon point becomes white hot causing the solder to flow.

Graphite Electronics Inc., La Salle, III. 61301

#### Cable Detector

In one operation a person can both trace a path of an underground cable and locate a fault in the line even if buried several feet under asphalt or concrete. The cable locator/fault finder consists of a transmitter, hand-held battery-powered detector with a built-in loudspeaker and meter, and a probe consisting of a ground spike on a long wooden handle.
Associated Research Inc., 3777 W. Belmont Ave., Chicago, III. 60618