

tested can be easily and cheaply done using plastic sheeting.

Here is how air-layering with plastics is done at the Glenn Dale experimental station; you can do it too:

Select branches for air-layering from new spring growth, picking well-shaped erect specimens. With a sharp knife remove a circle of bark one-inch wide from the stem where the layer is to be made. Dust the wound lightly with one of the standard root-inducing substances (such as Hormodin No. 3), available at nearly all nurseries.

Nurseries Have Supplies

Sphagnum moss can be purchased at most nurseries, too. Preparing the moss properly is an important step. It must be moist, but not too wet. Pour water over it slowly while you mix the moss with your hands; then squeeze it tightly to get out surplus water. Just dropping the moss in water and trying to wring it out will not be good enough.

When the moss is ready, form it into a ball and place it around the wound in the stem. Cover this with a piece of six-by-nine-inch plastic sheeting, making sure it overlaps enough not to leave any moss exposed to air. Twist the ends into spirals and fasten with plastic-covered wire ("Twist-em"). Your air-layering is done.

The plastic used in most tests goes under the general name of polyethylene or polythene. Trade names for appropriate plastic sheeting are Alathon, Polyethylene, Howard-Seal, Pearlon and Tralon. The ordinary plastic sheeting and bags used in your ice-box are of this material and can be purchased in most kitchenware shops.

If you make air-layers in the spring, by fall there should be enough root development to allow you to cut off the newly rooted branches and pot them.

In the short time since air-layering with

plastics has come into being, there has not been the chance for enough experimentation to determine just which woody plants do and which do not respond readily to air-layering. But in general, you will find that most of the woody plants in your garden will take kindly to air-layering. If you remember that you are performing a useful experiment when you air-layer an untried woody plant, the fun of the whole business should be doubled for you.

Plastics Have Advantage

For those who like to buy their materials in a package, there is a commercial product now on the market, called "Air-wrap," which includes plastic sheeting treated with nutrients, hormones, insecticides and fungicides; sphagnum moss; and material for tying the plastic.

The use of moisture-resistance plastics in air-layering has led to their being tried out on other gardening problems. Dr. W. E. Whitehouse, horticulturist of the U. S. Department of Agriculture's Bureau of Plant Industry, has successfully used Polythene sheeting and bags on budding and grafting of fruit trees.

Instead of the usual grafting wax or similar compound to protect the cut surfaces of cleft and whip grafts on apple trees from drying out, Dr. Whitehouse wrapped the cut areas with Polythene sheeting or covered them with Polythene bags—the very same plastic bags housewives use to keep vegetables in. The grafts took successfully. When the plastic was removed, he applied a coating of shellac to the cut areas as simple protection.

The great advantage of using plastics in grafting is in the ease with which it may be done, in comparison with the rather laborious process of melting and applying grafting wax in the field.

Science News Letter, June 20, 1953

TECHNOLOGY

Subscription TV System

➤ HIGH-QUALITY television shows uninterrupted by commercials may be just around the corner if the Federal Communications Commission stamps its approval on a new system of subscription television that was shown to 10,000 persons in New York recently.

The system promises to permit video set owners to see first-run movies, Broadway plays, grand operas, educational and cultural programs and sports events at a "nominal cost." Persons who do not subscribe to the service would not be able to pick up the programs on their TV sets.

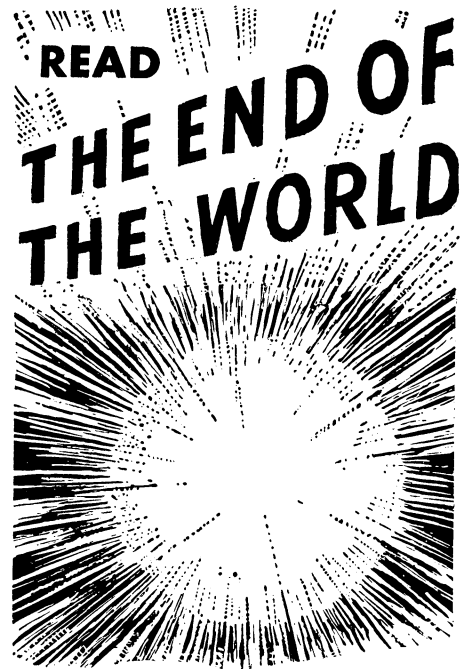
Developed by the Skiatron Electronics and Television Corporation, the system is not designed to replace ordinary commercial television. Company engineers report the system will supplement it instead, and

will enlarge the video viewer's scope of programs. This is particularly true in the educational field where many programs now cannot be aired because of financial difficulties.

Subscribing TV stations, according to the system, would send out both picture and sound in code. The scrambled signals would produce a blur on the screens of TV sets not equipped with a decoder, and the sound would be unintelligible. Subscribers would have a decoder for their sets and could insert a program card into the device.

The decoder is so constructed that it indicates what programs the subscriber tunes in on. These are the only programs the subscriber must pay for, company engineers said.

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A Scientific Inquiry

By KENNETH HEUER

Illustrated by CHESLEY BONESTELL

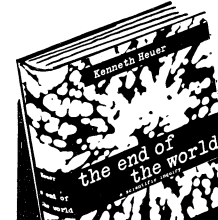
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KENNETH HEUER is a fellow of the Royal Astronomical Society, former lecturer at the Hayden Planetarium, author of *Men of Other Planets*.



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