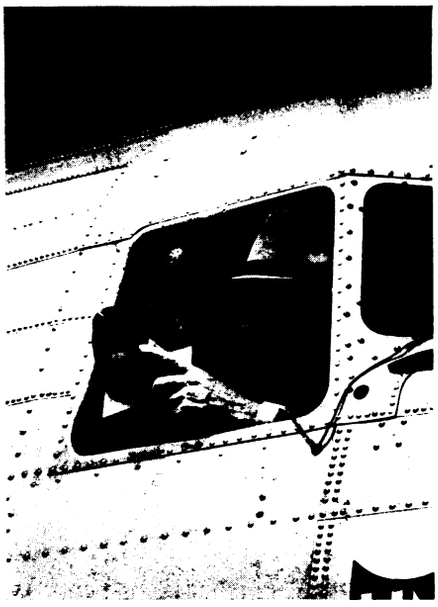


SKYHOOK

Oren C. Durham with the improved streamlined "skyhook" used for collecting pollen grains and other microscopic objects at high altitudes.

ing public at large has become pretty well disillusioned about the quack and patent-medicine "cures" in which some of them once had faith—no small gain in itself, for it leaves the hay fever victim the more disposed to try more promising measures for relief.

Second advance is the development of really effective air filters for use in connection with air-conditioning systems for homes and apartments. Not all air-conditioning systems exclude pollens and road dust—which for some persons is as bad as pollen. However, some of them do, notably the types that run the air through oil-soaked glass wool, or some similar device. It has become possible for hay fever victims who used to flee to the mountains every summer to remain comfortably in the city, if they are willing to remain virtual prisoners in such air-conditioned apartments and offices. Such comfortable imprisonment can hardly be reckoned as real adversity.

Best of all, in the end, is the promise of abatement of the ragweed pest itself. We are becoming more conservation-conscious, and also more aware of possibilities of beauty along our highways. So we are taking active steps to check gullies in fields and pastures with permanent, perennial vegetation, and at the same time our highway authorities are beginning to landscape the roadsides instead of merely keeping them smoothly barbered. Both these processes deprive ragweeds of some of their best homes.

At the same time, the natural revegetation of cut-over and burned-over forest areas is slowly driving out great masses of ragweed that moved in when the old-style, cut-clean-and-clear-out lumbermen went away and left smashed deserts behind them. It may be a long time before log-size trees grow in the cut-over lands, but mere thick stands of brush, such as deer and grouse love to inhabit, are sufficient to suppress the ragweeds. Just the ordinary healing processes of nature, if left to themselves, will in time rehabilitate the one-time hay fever resorts of the old North Woods—and maybe add features attractive to sportsmen later in the season, as well.

Science News Letter, August 5, 1939

INVENTION

Rose From Ireland, Cheap Lens Method, Among Patents

AMONG the patents issued recently to inventors by the U. S. Patent Office are:

A new kind of hybrid tea rose from Ireland having vigorous growth and an abundance of white exhibition flowers "softened by a Martius Yellow glow at their bases." (Plant Patent No. 325)

A chemical means of stimulating the buds of deciduous trees to hasten blossoming. (No. 2,166,123)

Method of molding low-cost nonbreakable spectacle lenses from thermoplastic transparent materials. (No. 2,166,215)

Methods of producing artificial silk in which finely divided foreign substances are put into the filaments and then partially removed to give a pitted surface having a dull finish. (Nos. 2,166,739-41)

Means of fortifying cereal products with minerals essential to a proper diet. (No. 2,166,797)

An electrical circuit that makes windows close automatically when it rains. (No. 2,166,481)

From Germany, a new type of pneumatic tire having a myriad of tiny interconnected cells which are inflated so that, when a puncture occurs, the air leaks from them slowly and gives a temporary auxiliary cushion. (No. 2,166,511)

A new kind of ice formed by the addition of a small amount of benzoic acid which imparts non-cracking characteristics to the ice. (No. 2,166,113)

New type bath tub in which a shower may be taken while in a sitting position. (No. 2,166,469)

Japanese method of making aluminum alloys having better forging properties. (Nos. 2,166,495 and 2,166,496)

Airplane with folding wings. (No. 2,166,564)

Air conditioning system for automobiles. (No. 2,166,635)

Simple metal clamp device to be placed on automobile tires to hold ends of tire chains while they are being attached. (No. 2,166,869)

Among the design patents of the week was one for a tiny camera concealed in the bowl of a pipe. (No. 115,727)

Aircraft supercharged power plant with a radiator placed behind the engine inside the body of the plane with ducts leading air to the radiator for cooling action. (2,165,443)

Method of soil gas analysis for determining the contained hydrocarbons that will be useful in petroleum prospecting. (No. 2,165,440)

A starting system for sprint races so arranged that the starting gun cannot be fired unless all the contestants' hands are properly lined up on the mark. (No. 2,165,749)

New type of lawnmower having an enclosed horizontal cutting blade turned by power shaft mounted vertically. (No. 2,165,551)

Special system of weaving stockings to create "nonrun" hosiery. (No. 2,165,520)

A stereoscopic rangefinder with double telescope system. (No. 2,166,046)

A method of underwater riveting by explosive action. (No. 2,166,041)

An electric system of room heating by use of radiant panels. (No. 2,165,970)

A clock mechanism for automatically

opening parachutes after a specified time. (No. 2,165,954)

Process for making a pencil with multicolored lead which writes in different hues depending on wear. (No. 2,165,827)

Microphone system for recording telephone conversations. (No. 2,165,546)

Periscope mounting for cameras so that they can be snapped while held high overhead. (No. 2,165,512)

Cold storage locker room having a matrix of individual lockers each of which can be lifted by an overhead traveling crane. (No. 2,165,513)

New golfing aid to set tees at predetermined height by inserting tapered shanks of tees through different size holes in a small flat sheet laid on ground. (No. 2,165,479)

A shifting device for automobiles which makes possible curb-side parking in a space hardly larger than the length of the car. (No. 2,165,461)

Multiple engine mounting for airplanes in which two or more engines, through bevel gears, apply power to the same propeller. (No. 2,165,453)

Sanitary tooth cleaning element of sponge rubber with dentrifice included which is to be used once and thrown away. (No. 2,165,420)

Gear shift for bicycles in which the gears are changed by back pedalling. (No. 2,165,201)

Special flat type radio speaker mounting for placement on the roofs of automobiles. (No. 2,165,637)

New type thermoelectric rotary razor which burns off the whiskers. (No. 2,164,581)

Silk or rayon stocking of composition weave having resilient rubber fibers over the knee to prevent runs. (No. 2,165,012)

Chemical method of producing synthetically ascorbic acid, or vitamin C. (No. 2,165,151)

Safety electric mine lamp having an automatic circuit breaker to prevent explosions if the glass bulb is accidentally crushed in service. (No. 2,165,193)

A new means of protecting green logs and lumber from wood boring beetles by the use of diphenyl and triphenyl chemicals. (No. 2,164,328)

A transparent wound dressing provided with a nondrying adhesive made of chlorinated rubber and a plasticizer. (No. 2,164,360)

Dual training tables for instruction in the use of airplane navigating instruments. (No. 2,164,412)

For possible use of musicians, a lip exerciser consisting of a light flat spring device to be inserted in the mouth and compressed with the lips. (No. 2,164,458)

A new type of rubber auto tire having two inner tubes side by side separately inflated, designed to give blowout protection. (No. 2,164,686)

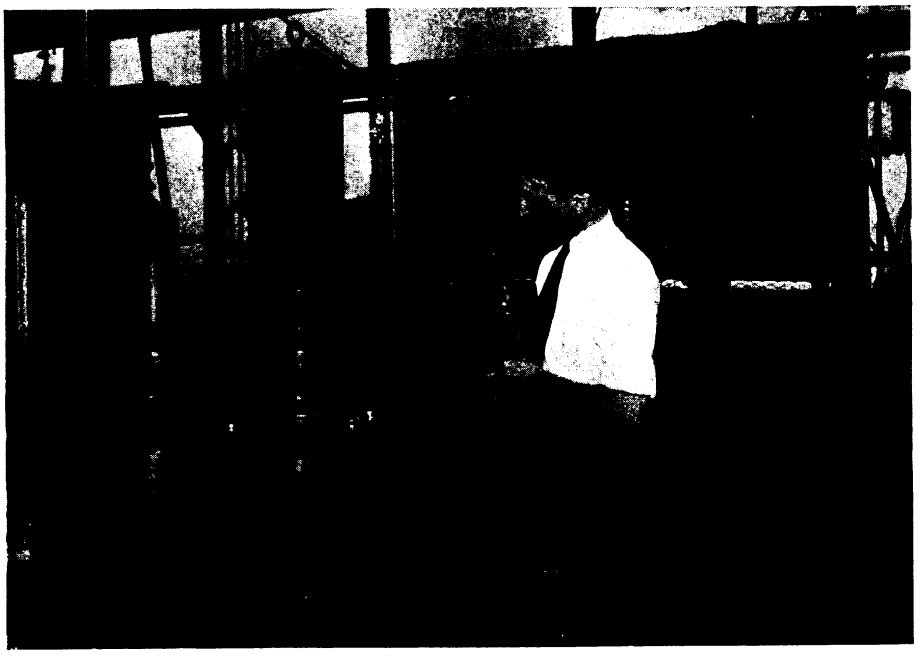
Method of producing crepe effects in rayon threads by chemical treatment of the fibers before drying with a solution rendered insoluble by the drying process. (No. 2,164,479)

Controllable pitch propeller. (Nos. 2,164,489–90)

A composite fabric for wearing apparel consisting of two outer layers of pliable fabric between which is a soft packing of loose fibers for extra warmth. (No. 2,164,499)

New type of slot device for airplane wings to increase drag when needed for better control. (No. 2,164,531)

Science News Letter, August 5, 1939



DEMOUNTABLE FILAMENT

Held in the engineer's hands is the demountable filament assembly of the new giant radio tubes of station W2XAF.

RADIO

America's Radio Big Bertha Gets Demountable Filaments

UNCLE SAM's radio Big Bertha—the 100 kilowatt transmitter of station W2XAF in Schenectady that sends its directed beam toward South America in competition with the radio programs of Europe's dictator nations — has radio tubes so large that they have 18 filaments, each of which is demountable and replaceable.

When the station soon steps up its power from 40 to 100 kilowatts, two of these giant tubes, the first with demountable filaments, will take over the job now done by six tubes in the present power set-up.

Each tube, with its accessory units, stands higher than a man. They are not sealed permanently but are continually kept at a low vacuum by pumps.

"The impression has been gained," states C. H. Lang, manager of broadcasting for the General Electric Company, "that stations in various countries have tried to black out the signals of other stations, in order that their own signals could be heard. This is untrue and, as a matter of fact, the well-operated