

particularly voiles. It is a water-soluble, partially condensed, urea formaldehyde resin in paste form. Because of the small size of its molecules it can penetrate the textile fiber. A curing process fixes it within the fiber cells.

When applied to certain fabrics under the minimum of tension, shrinkage control is also obtained. When used in combination with another resin made by the same company, permanent water repellence and anti-crease finish are obtained in one bath.

Rot-proof cotton cloth is something new in the textile field. It is not a quality particularly essential in the clothing field but, being mildew-proof as well, is suitable for garments to wear in hot countries. Its greatest value is in cloth that is in contact with the ground, but also in tents, awnings and bags for fruits and vegetables.

This rot-proof cotton is a development of the U. S. Department of Agriculture in its research laboratory at New Orleans. It is a modified cotton, a partially acetylated cotton somewhat related to rayon made by the acetate process. In tests it failed to rot during six months under ground in soil where ordinary cotton would rot in a week or two.

Not All for Clothes

Not all of the new chemically or otherwise treated fabrics are designed for clothing. Some are treated to assure longer life when used in upholstery or to provide beauty and safety from fire hazards when used as draperies. Flame-resistant fabrics are essential in night clubs and other public places where people assemble.

Other fabrics are treated for easy cleaning. A new table cover which resembles ordinary linen, can be kept clean on the table by wiping with a damp rag. Still others are waterproof sheeting for hospital and other uses. These can be made into raincoats and capes, and into protecting panties for baby.

Then, there is a gold- or silver-colored fabric that has many decorative uses in the home although designed for use in public places. It is a metal-coated plastic fabric that has a mirror-like finish. Its trade name is Miromesh, and it is made by the National Research Corporation.

The base material in this fabric is a mesh that resembles wire screening with the spaces filled with a cellulose acetate film. The fiber of the mesh is a well-known plastic called Saran, a com-



NON-INFLAMMABLE—Treatment makes fabrics resistant to flames and water.

pound of polyvinylidene chloride, which is highly resistant to most chemicals.

The mesh, filled with the acetate, is coated on one side with a thin film of aluminum applied by a high-vacuum process. This is covered with a protective lacquer. Over the silver finish, it is a clear lacquer; a gold-colored lacquer is used for the gold finish.

Beautiful draperies that defy fire, made by Plymouth Fire-Guard Fabrics, are woven of a combination of very fine glass fiber and flame-proofed cotton yarn. They are designed particularly for use in public places but are suitable in homes. They come in a wide range of colors and can be dry-cleaned, cut, sewed and ironed as easily as all-cotton materials.

In the future, the buyer of clothing will have to go further than the looks and the feel of the fabric. He will have to take the manufacturer's word for the invisible substances contained and, until tested, his word for the special qualities added to the cloth.

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DENTISTRY

Dental Drilling Painless With Topocaine Anesthetic

➤ A NEW anesthetic for taking the pain out of the dentist's drill was announced by Dr. Gustav William Rapp of Loyola University School of Dentistry at the meeting in Boston of the American Dental Association.

The anesthetic is put right on the spot that would hurt when the dentist drilled. It is not necessary to inject it into the gum by hypodermic needle. In limited tests it was successful in three out of four patients.

The anesthetic is a mixture of two

older ones, procaine and benzocaine, in an alcohol solution. In most cases it takes only one or two minutes to take effect.

Dr. Rapp said that additional experimentation will be necessary before the new anesthetic, which he calls topocaine, can be recommended for general use by dentists.

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AERONAUTICS

Scout and Rescue Plane Passes Rough Water Tests

See Front Cover

➤ THE NEW Navy Seahawk, the Curtis SC-2, has completed successful rough water landing tests at the Naval Air Test Center in Patuxent, Md., after repeated take-offs and landings simulating conditions encountered in the open sea.

The new seaplane is a version of the Curtis SC-1 which made its first flight early in 1944. The SC-1 took active parts in warfare later, its first action being in 1945 in the pre-invasion bombardment of Borneo. It is a low-wing monoplane with wings that fold back for storage on shipboard. It is a single-seat affair.

The new Seahawk is much like its brother but is a more rugged plane that can withstand rough water when afloat. This is important because this shipborne plane is not only a scout and fighter but is also a rescue craft. One feature of the new version is a separate door which allows a person rescued from the sea entry to a compartment and seat behind the pilot.

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Molds grow on anything from which they can get enough food.