

• New Machines and Gadgets •

⚙️ **FLEXIBLE** rubber-like plastic materials recently developed are used in handling toluol, xylol and benzol which give the new super-gasolines their tremendous power. Connection hoses, protective gloves and aprons are made of these materials, claimed to be the most solvent-proof rubber substitute yet developed.

Science News Letter, November 13, 1943

⚙️ **STEEL** and rubber, bonded by a new agent and process, are almost inseparable. By the same process metals may be firmly bonded with wood, leather, plastics and other metals. The surfaces are coated with the bonding material. After drying, mild heat and pressure are applied.

Science News Letter, November 13, 1943

⚙️ **WASHING MACHINES** of a type recently patented operate by forcing suds into the clothes, the pressure agitating the clothes at the same time. The suds are kept in constant circulation by an electric pump operating under a false bottom.

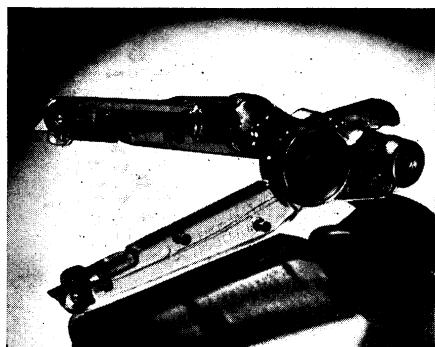
Science News Letter, November 13, 1943

⚙️ **COAT HOOKS**, made of a thermo-setting plastic by injection-molding, are replacing metal hooks on Navy boats. After the war they will be available for civilian uses in colors to harmonize with room finishes.

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⚙️ **PLASTIC PLIERS** are used to pull and test fuses in munition and other plants and also in the armed services. Transparent plastic permits the user to observe a small enclosed bulb which lights up when a good fuse is checked. The picture shows a pair of these pliers.

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⚙️ **DOUBLE-EDGED** razor blades are quickly sharpened with a small abrasive block slightly hollowed lengthwise. A shelf and guard in the center prevent sidewise movement while the blade is pushed forward and back. A patent has just been issued.

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⚙️ **QUICKLY REMOVABLE** boots are laced in the rear to adjust them to fit the legs. Each boot has two zipper openings in the front; the extra or emergency one opens by pulling the zipper upward. Parachutists wearing these patented boots can shed them easily if they are landing in deep water.

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⚙️ **MACHINERY** and machine tools may now be coated with a new "pebble" finish which is applied without fillers, sanding and numerous coats of sealing paint. Much time is saved by the use of this finish, which is sprayed or brushed on.

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If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N. St., N. W., Washington 6, D. C., and ask for Gadget Bulletin 182.

GEOLOGY

Mexican Murder Pit Only 500 Feet Deep

➤ **TASCO'S MURDER** pit, known as Hell's Mouth, is a mere 500 feet deep, as determined by explorations by Mexico's leading geologist, Dr. Ezequiel Ordonez.

Although relatively shallow compared with its rumored mile extent (*See SNL, Oct. 30*) into the ground, governmental authorities determined that it should be dynamited so as to close it and prevent its use as an illegal execution spot.

The destruction of the pit was undertaken by two engineers, Cornelius Crosby, American connected with the zinc and lead mines nearby, and Saul Mora, a Mexican engineer. Mayor Bernabe Rios, of Tasco, authorized the demolition at a cost of about \$500.

Legend has it that pre-conquest Indians and early Spaniards threw their enemies into the pit, and recently murders have been committed in Hell's Mouth.

Dr. Ordonez in his geological explorations found that the deep pit consists of a limestone rock layer over

granite and that it is a good example of the rock strata that run from Mexico City to Acapulco.

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MEDICINE

Skin Care Important For Workers in Industry

➤ **THE SKIN** of a war worker is just as important and should be given just as good care as the skin of a stage or screen star. Skin that is rough, cracked and has little cuts on it is not only unsightly but may be dangerous to health because it provides such an easy way for germs, dirt and irritating chemicals to get into the body. Time taken to cleanse the skin and to put on protective gloves, sleeves and the like is time well spent and may save a far greater amount of time from being lost because of skin trouble.

A man or woman with hands swollen by skin disease can no longer do precision work and such disability presents a tremendous obstacle to the smooth production of tanks, planes, motors, guns, small arms, munitions and explosives, Dr. Louis Schwartz, U. S. Public Health Service expert on industrial skin diseases, points out.

Dirt, he warns, plays an important part in prolonging skin diseases and cleanliness is important for preventing them. The lesson is one we all should learn, but men and women workers in war plants who have never worked in factories before need particularly to learn this for their own protection and for the war effort.

Industrial skin disorders are more apt to attack the new worker, Dr. Schwartz warns, because older employees learn the hazards of their particular trade and how to avoid them.

In many plants the foreman, doctor, nurse or perhaps the safety director will tell new employees about any special hazards and how to guard against these. Workers should remember to follow these directions which are based on scientific studies of prevention of skin disease.

Besides being careful to keep their skin clean, workers may need to learn the proper way to do this. Many workers blame their work for their skin eruptions when the condition actually has been caused by the harsh methods or materials used to clean hands and bodies after work.

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