

## New Machines And Gadgets

### Novel Things for Better Living

For blackout nights or last-minute makeup in the taxi or in a dark doorway, girls will welcome a new illuminated vanity case. It contains a small built-in flashlamp provided with reflector and translucent diffuser which throws a soft, flattering light on your face when you look at yourself in the mirror. The lamp lights when you open the case and goes out when you close it. The inventor has been awarded patents on a variety of forms of the invention.

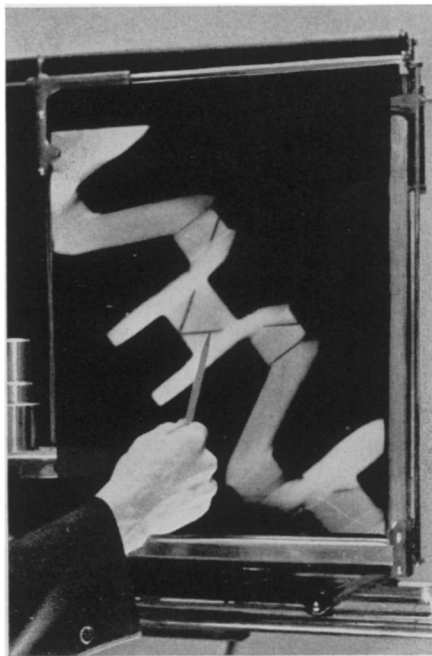
Now you can see the stars through the roof of your car or, if your interests while driving are more mundane, you can see a high traffic light without leaning forward—something the present low windshields do not permit. This contribution to safe driving is not a roof window, but an extension of the windshield a little ways up onto the roof. It has been awarded a recent patent.

An ink well which, though always open, never spills, even if you turn it upside down and shake it, is an invention recently patented. It is a simple little thing. Why didn't I think of it myself? It's as easy as Columbus's egg. A piece of sponge rubber fits accurately inside and soaks up all the ink. Consequently it can't spill, whatever you do, except break the bottle. But when you dip a pen in and depress the rubber, ink flows into the cavity formed. And when you remove the pen, the cavity closes up and all the ink remaining is reabsorbed.

**Manicure your nails by machinery.** Men have the electric razor, why shouldn't girls have the electric nail polisher and trimmer? They should and can—for it has already been invented and patented. You hold it in one hand, turn on the switch, and either a rotating file or polisher can be brought into contact with the fingernails of the other hand. Both the file and the polisher are large flat disks that will not soon wear out.

**Gas, of all things, is coming into use for electrical insulation.** It is used in the new million-volt X-ray transformers and now in underground electric cables, for which patents have recently been granted. The usual insulation on the wires is retained, the gas merely filling the spaces between the wires. Oil and other liquids were previously used for this purpose.

This is an X-ray photograph of a motorcar crankshaft taken with a 400,000-volt X-ray machine. Any flaws would be indicated on this negative by dark spots or streaks. The picture re-



quires but a few minutes to take, whereas older and less powerful machines required two to six hours.

**Suburban husbands rejoice!** Raking up leaves in the Autumn will no longer be quite the pesky chore it always has been. Chief annoyance, of course, next

to doing the job at all, is the irritating way the leaves stick to the rake, necessitating every now and then lifting it up and picking the leaves off with your fingers. A rake-cleaning attachment, just patented, avoids all this. You just push a sleeve on the handle of the rake and, presto, the leaves drop off.

**A bib for the nurse or mother** instead of for baby is a novelty just patented. It ties round the neck like any other bib but hangs both in front and in back, so that mother's dress is protected when baby is held over the shoulder in the air-expelling after-feeding position.

*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, D. C. and ask for Gadget Bulletin 79.*

CHEMISTRY—AGRICULTURE

### Test to Tell Virgin Soil Relies on Heavy Minerals

**A**WAY to tell whether or not soil has ever been cultivated has been developed by Dr. H. J. Lutz, of Yale University (*Science*, Oct. 10). Soil that have been plowed and cultivated contain a consistently higher percentage of heavy minerals in their upper layers than do comparable virgin soils.

*Science News Letter, November 15, 1941*

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