#### Suit the Remover to the Cloth

Before starting to treat a stain, be sure you know what the cloth is made of—whether cotton, wool, silk, rayon, or a mixture. A stain remover successful on one kind of cloth may ruin another. Naturally, you want the method that will do the least possible damage to the cloth.

Strong acid removers destroy cotton and linen cloth; even mild acids, such as lemon juice and vinegar, may injure cotton and linen if allowed to remain too long on the cloth. If you use a mild acid to remove a stain, apply a weak alkali such as ammonia water or washing or baking soda immediately

## Cotton and linen

to stop the action of the acid. Wash the material in water after the treatment. (See p. 10.) Strong alkalies harm these materials also, but weak alkalies are safe to use if you rinse

the article well in water afterwards.

All bleaches will rot cotton and linen if allowed to remain on the stain for more than a minute or two and will remove the color, too. Sodium perborate and hydrogen peroxide are the safest bleaches to use.

Strong acids and alkalies destroy wool or silk materials. Mild acids, except nitric, which weakens the material and turns it yellow, are safe to use. Even

### Wool and silk

mild alkalies such as weak solutions of ammonia water, borax, or washing soda, must be used with care on wool. Bleaches that contain chlorine, such as ordinary bleaching powder, also destroy wool and silk. Sodium perborate is a good bleach

to use, particularly on wool. Use lukewarm water—hot water turns both wool and silk yellow, shrinks wool, and injures the finish of silk.

Here are a few safety rules to follow in removing stains from rayon material.

Never use strong acids or alkalies; they injure the material. Mild acids or alkalies usually do not harm it if properly rinsed. Water

Rayon and weakens rayon: do not pull or twist it when it is wet Sodium

# Rayon and synthetics

weakens rayon; do not harm it if properly rinsed. Water weakens rayon; do not pull or twist it when it is wet. Sodium perborate and hydrogen peroxide are the safest bleaches to use, but mild chlorine ones can be used with success.

Three kinds of rayon are made in this country—viscose, cuprammonium, and acetate. In removing stains from viscose and cuprammonium rayon, treat the material like cotton or linen. But acetate rayon is different. It dissolves in acetone, alcohol, or chloroform, so test a sample of any rayon material before using these liquids to remove a stain. Mixtures of alcohol and ether, or alcohol and benzene also are unsafe to use on acetate rayon or on colored material. Always mix alcohol with 2 or 3 parts of water before using it. Pressing with a hot iron may melt acetate rayon.

Synthetic materials, such as nylon and vinyon, are not harmed by either acids or alkalies. Water does not weaken them, as it does the rayon. They take up very little moisture, and as a result, stains such as coffee, tea, and fruit juice, remain on the surface and wash off easily. You may use bleaches safely on nylon or vinyon. But vinyon, like acetate rayon, dissolves in acetone and

chloroform, so test a sample of the material before using either of these to remove a stain. Press nylon with a warm (not hot) iron.

Other synthetic materials are made from peanut, corn, soybean, milk casein, and fish protein, but as yet they are not common and are not generally recognized. Treat them as you would silk and wool in removing stains.

#### Suit the Remover to the Stain

Find out what the stain is, if possible, before trying to remove it. The wrong treatment may set a stain so that it is impossible to take it out. Always test water or any chemical stain remover on a sample of the cloth or on a hidden part of the garment (seam or hem) to be sure it will not change the color. You may have to choose between the stain and a faded spot.

If the stain is not greasy, first try to remove it with cold water. Hot water sets many stains and makes them harder to remove. Always test a sample of the cloth to see if water spots it. If not, place a pad of clean cloth underneath the stain, with the stain face down.

To sponge, use a soft cloth, dampen it with cold water, and cover with a layer of dry cloth so that it is not too moist. Then sponge the stain with light, brushing motions, working from outside of stain to the center. Spread the moisture into the cloth around stain to keep a ring from forming.

The trick is to spread, or "feather-out," the liquid around the stain until there is no definite edge when the material dries. It may help to go over the spot with a cloth wet with alcohol mixed with 2 parts water. As alcohol changes some colors and dissolves acetate rayon, use it sparingly. Finally pat the spot with a dry cloth. Dry rapidly to prevent water rings.

Right.—To remove a water ring, rub the cloth between the hands; then scratch with the fingernail. Left.—Sponge a nongreasy stain with water. Work from the outside of the stain to the center. Spread moisture unevenly into the cloth around the stain.

