DENTISTRY

Use Mirror and Eyeglasses For Proper Toothbrushing

➤ WHEN YOU brush your teeth, look in the mirror and put on your eyeglasses if you wear glasses for reading.

This new addition to the morning and evening toothbrushing routine is advised by Dr. Dorothy G. Hard of the University of Michigan School of Dentistry, Ann Arbor, in a report to the American Dental Association.

Best way to prevent gum trouble, she says, is by keeping the teeth "continuously clean" and keeping them in shape to function.

To keep them really clean, you should watch each stroke of the toothbrush. Look in the mirror over the washbowl instead of down into the bowl as you brush.

If a flavored tooth paste or powder makes brushing pleasanter, use it, but it will have no treatment value, Dr. Hard says.

Rinse after brushing, to flush out any remaining debris, Dr. Hard advises, pointing out that the "least expensive and most available wash is water."

Dr. Hard's directions on how to brush are:

The brush is placed against the upper gum tissues with the bristles pointing up. Pressure is then exerted on the tissues with the side of the bristles to blanch them momentarily. The pressure stimulates circulation and increases tissue resistance.

Then the brush is moved by a wrist motion carrying the bristles downward and slightly sideways in order to reach the surfaces between the teeth. For the lower teeth, the same movements are used in reverse.

The strokes should be performed slowly and repeated four or five times in each position until all areas are covered and every tooth is reached.

Science News Letter, June 14, 1952

New 1952 Model!
35-mm. EXAKTA "VX"
Single Lens Reflex Camera

One lens both for viewing and picture taking assures perfect sharpness, accurate exposure, maximum depth of field, and correct composition for color. You always see the exact image before you take the picture—whether the subject is an inch or a mile away, whether it is microscopic or gigantic, whether it is moving or stationary. Instantly interchangeable lenses permit telephoto, wide angle, close-up, copy and microscope photography. With f2.8 Zeiss Tessar "T" Coated Lens with Pre-Set Diaphragm Control .....$269.50 tax included

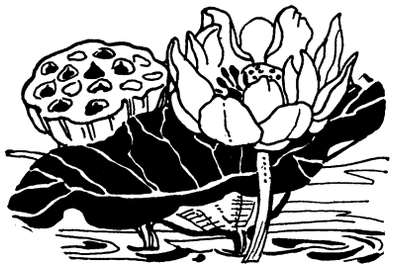
Write Dept. 900 For Free Booklet "I"

NATURE PHOTOGRAPHY WITH MINIATURE CAMERAS by Alfred M. Bailey (Denver Museum of Natural History). This eminent explorer and scientist displays his finest Exakta photographs and others along with explanatory material. 35 full page photographs. 64 pages.....50c

EXAKTA CAMERA CO., 46 W. 29th St., New York 1, N.Y.

BOTANY

NATURE RAMBLINGS



Vegetable Ventilators

➤ THE INGENIOUS device known as the snorkel tube by which air in submarines can be replenished, is after all not original.

If you will cut through the stem of a waterlily or a lotus, or almost any plant that grows with its roots under water, you will find that it is not solid like the stems of most land plants, but that it has one or more holes in it.

If you split the stem lengthwise you will find that these holes are long open channels. They lead down from leaves and flowers clear to the submerged roots.

The roots of a plant must have air, just as the leaves must. Without it they smother, just as a drowning man really dies of suffocation because he cannot get air into his lungs.

Plants, unlike animals, do not have an elaborate system of lungs, respiratory muscles and blood corpuscles to carry oxygen supplies to the body's remotest tissues. Their oxygen supplies reach all their cells quite directly.

That is one reason why leaves are a plant's most active organs—they are flat and thin, and oxygen from the air does not have to travel far to supply all their cells.

Although the roots of most common plants are underground, they can still get their oxygen. Enough air filters through the myriad crevices between soil particles to take care of that. That is, it does when the soil is in good tilth; if there is too much rain and flat fields are flooded too long, most of the plants in them simply die of drowning.

Herbaceous plants like waterlilies and arrowleaf are not the only ones that have air-passages in their stems. Waterside shrubs like the buttonbush, and even great trees like the pond cypress, have breather systems. They differ in details of structure but they all serve the same function in the end.

The cypress uses a peculiar contrivance to get air to its roots. Every here and there a steeple-shaped structure projects up through the water where the trees stand. It is not hollow, like stems of some aquatic herbs, but is filled with a loose, sponge-like woody tissue, through which air can filter without too great difficulty.

Science News Letter, June 14, 1952

SURGERY

Brittle Bones Shifted

➤ SOME CHILDREN are born with brittle bones that break on very little pressure. Just why these bones are so brittle is not known to medical science.

The results of laboratory tests do not show a lack of minerals or other substances in the body, or even a deficiency of hormones, which are chemical substances normally produced in the body, reports the Illinois State Medical Society.

Even though the exact cause of this brittleness is not known, heredity seems to be a factor, since studies have revealed this characteristic in families.

Until recently, children with this brittle quality in their bones could not walk because of the repeated fractures. In many instances a child, after passing through adolescence, loses the tendency to have bones break so easily, while other youngsters having this brittle quality continue to break their bones throughout their adult lives. Again, the reason for this variation is not known.

Many medical and surgical procedures have been attempted to overcome the repeated fractures resulting from the brittle quality of the bones. One that has proved successful in a number of instances is the removal of the bone from the body.

For example a thigh bone is removed and cut into several sections and rearranged in an effort to obtain the straightest alignment. It may be necessary to turn some pieces end for end, or even rotate them. Then a metal rod is inserted to hold the pieces in line and to provide a slide support so they will not break so easily in the future.

When this procedure is accomplished the bone is returned to its position in the leg and fastened to the growing ends of the bone, at the top and bottom. The growing ends of the bone are never removed from the body, since these growing sections must remain in the body to renew again the growth of the bone.

Science News Letter, June 14, 1952

Science Service, Inc. is collaborating with JSTOR to digitize, preserve, and extend access to *The Science News-Letter.* www.jstor.org