

slightly if sharp pictures are to be secured. The most convenient way of using the new bulb is with a synchronizer that permits snapshots, the shutter being opened automatically while the flash is at its height. However, as with ordinary flash bulbs, the shutter of the camera, on a firm support, may be opened, the bulb fired, and then the shutter closed. This method is not effective in stopping rapid movement.

Photographs may be taken in theaters and similar places without disturbing the audience. Another use is seen in case of possible blackouts, where photography can be done without the visible flashes of light that might be of use to enemy raiders.

The new infra-red flash bulb is manufactured by the Wabash Photolamp Corporation, of Brooklyn, N. Y.

Science News Letter, August 23, 1941

PHYSIOLOGY

Record-Breaking Case of Weight Reduction Reported

Woman Gets Rid of 300 Pounds in 18 Months; Heroic Dieting Causes Improvement in Health

LOSING 300 pounds in 18 months is the heroic feat in reduction accomplished by a woman patient whose case is described by Dr. James J. Short, associate professor of medicine in Columbia University's post-graduate medical school, in the *Journal of the American Medical Association*. (Aug. 16).

The patient, who for obvious reasons remains nameless, is a married woman 35 years old. She had always been a "fat girl"—she weighed 200 pounds when she was 14; 260 pounds at 21. Both her parents had been big persons; her father a six-foot 200-pounder, her mother decidedly stout. She herself had abnormal dietary habits, eating moderate quantities of meat, fish and eggs, little fruit and no vegetables, but stuffing herself with large amounts of cake and other baked goods.

Finally, with a troublesome cough of five or six months' duration and a number of other distressing symptoms, she presented herself for medical treatment. There seemed to be nothing the matter with her except extreme obesity, so a diet calculated to produce rapid reduction was outlined for her. Since it seemed unlikely that she could exercise sufficient self-control during the reducing period, she was placed in a nursing home where she would have no chance of raiding the pantry, no matter how hungry she became.

The diet provided first for sufficient proteins to replace ordinary losses from muscles and other non-fatty tissues, and also insured proper vitamin intake. Heaviest cuts were in fats and carbohydrates, the fat-making foods. Total

calories were between 600 and 800 a day—about half the usual requirement for a normal adult.

The patient lost weight rapidly from the first. Over the 18-month period the loss averaged 16 $\frac{2}{3}$ pounds per month. In the end, she had been transformed from a behemoth of nearly 480 pounds to a husky but trim-enough figure of 175.

There were difficulties on the way, to be sure. The patient was anything but

comfortable at times, and complained of nausea and abdominal pains. More serious was an acid condition that occasionally threatened. At such times, the diet was readjusted to include a little more carbohydrates, which are alkalinizing foods. All the way, a mass-reduction job of this kind was not a thing for an amateur to attempt; it required the constant vigilance of a medical specialist.

After the masses of fat had disappeared, there was still a serious condition to correct. The human skin does not shrink as drastic reduction occurs, and at the end of the treatment the woman had loose, unsightly, drooping folds of outer tissue on her body and arms. To correct this, surgical operations were necessary, to take out the slack.

Her muscles, once interpadding with fat, had become loose, so that at first she could scarcely walk. However, muscle tone was eventually spontaneously restored, so that she is now able to get about and do her housework in about normal fashion.

Science News Letter, August 23, 1941

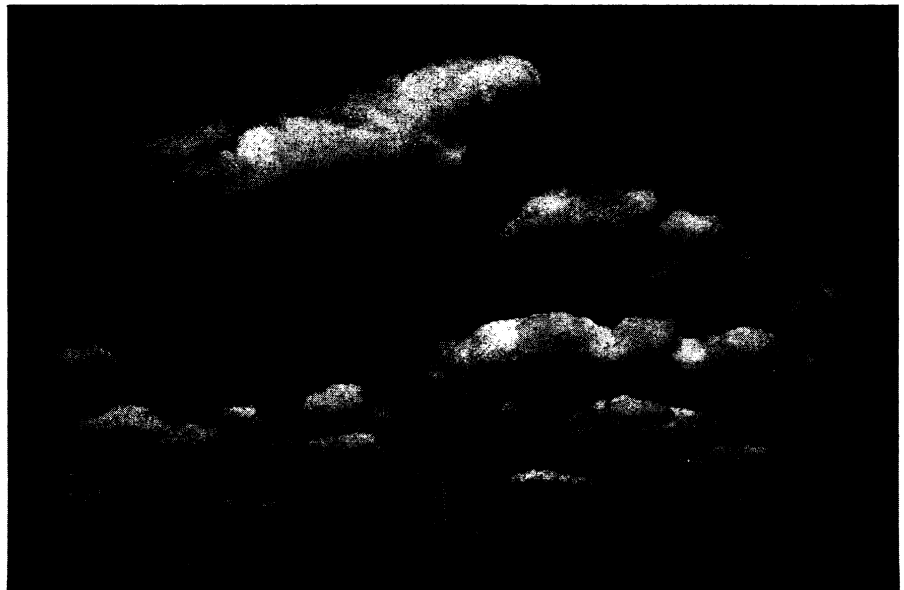
● RADIO

Thursday, August 28, 2:45 p.m., EST

On "Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Marston Morse, president of American Mathematical Society, will discuss "Mathematics in Defense."

Listen in each Thursday.



CLOUD SHORTHAND



This is the new symbol used on U. S. Weather Bureau maps for these wool-pack or cumulus clouds. The picture and symbol on the cover are of the cumulonimbus, or "anvil" cloud, familiar on thundery hot days in summer.