

MEDICINE

Penicillin Price Drops

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The price of the drug itself has dropped, since the March 15 general release for civilian use, from \$2.40 per 100,000 Oxford units to as low as \$1.54 per 100,000 units. This last figure is a wholesale price and the price to a physician may be \$1.80 to \$2.00 per 100,000 units.

This amount, 100,000 Oxford units, is enough to cure one case of gonorrhea. Most other illnesses require considerably more of the drug, depending on how early treatment is started and how severe the illness is. For syphilis two to four million units may be required. For osteomyelitis, a bone infection that is usually long drawn-out, as much as five million units may be needed. From 500,000 to 1,000,000 units are required for most illnesses in which penicillin is the drug of choice.

The price of sulfa drugs, which can be used for some of the same conditions as penicillin, is less than the price of penicillin. The cost of getting well may be cheaper when penicillin can be used, however, because recovery is quicker. This means less time in the hospital, a smaller bill for the hospital room or bed, and a quicker return to work and earning.

Sulfa drug treatment, however, can sometimes be given at home. The patient does not have to be stuck with a hypodermic needle every three or four hours day and night, as he does when undergoing penicillin treatment. The method of giving penicillin requires more visits by the doctor or more nursing attendance, which is likely to be reflected in the total cost of the illness.

The reasons for the low and possibly still lower cost of penicillin are competition and increased production. Production took a big jump in February, just before the drug was released for civilian use generally. The production increase is expected to continue, so it is reasonable to suppose the price will continue to drop.

The OPA ceiling of \$10 per 100,000 units has not been revised, partly because

of the drop in price and partly because of the time lag involved. It would take about two months for OPA to collect and analyze figures on which to set a new ceiling, by which time, if production continued to increase, the price would again be lower.

How cheap penicillin will ultimately become will depend upon the cost of manufacture as methods improve and upon trade conditions.

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CHEMISTRY

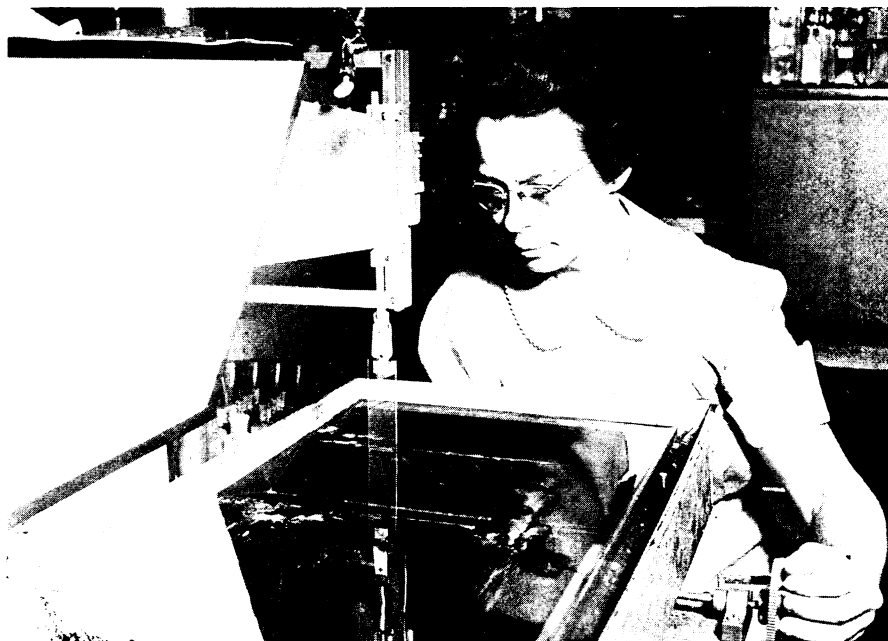
Invisible Glass Wins Award for Dr. Blodgett

► THE AMERICAN Association of University Women announced that the annual Achievement Award of \$2,500 goes to Dr. Katharine B. Blodgett of General Electric Research Laboratory at Schenectady, N. Y., for her work on building films of almost infinitesimal thickness.

Dr. Blodgett's invention of "invisible glass" has received widespread public recognition, but this is only a by-product of her long-time research, the awards committee pointed out. It was during her study of methods of building films, frequently only one molecule thick, that she developed a process of depositing a non-reflective film on glass. Her study of two-dimensional films, with a total thickness only one-quarter of a wavelength of light, has contributed to the efficiency of the lenses of submarine periscopes and aerial cameras by preventing wasteful loss of light through reflection. Another application of her work on molecular films is a gauge she devised for measuring, by light reflection, the thickness of any transparent or semi-transparent substance within a range of one- to twenty-millionths of an inch.

"Anyone who wishes to measure the thickness of a film which is only a few millionths of an inch thick can compare the color of his film with the series of colors in the gauge. The step on the gauge that matches his film in color will give him a measure of its thickness," Dr. Blodgett said at the meeting.

Dr. Blodgett received the award at ceremonies held on March 29 at the National Museum in Washington, D. C. This is the third year that the Achieve-



"BUILT-UP" FILM—Dr. Blodgett, working in her laboratory at the General Electric Company, is building the thin films, which afford scientists a valuable thickness gauge, by dipping them in and out of the water. The crank in her left hand raises and lowers the glass which holds the film.