MEDICINE

# More Than 80 Cancer Patients Given "Frozen Sleep"

## Patients With Hopeless, Inoperable Cancer Treated With Relief of Pain and Apparent Regression of Tumors

MORE than 80 patients with hopeless, inoperable cancer have so far been treated with the refrigerated "frozen sleep" method, it was announced by Dr. Temple Fay of Temple University, Philadelphia, at the dinner meeting of the New York City Cancer Committee. Gradually lower and lower temperatures have been tried and patients have been maintained at temperatures of 75 degrees Fahrenheit, or more than 23 degrees below normal body temperature.

The refrigeration method for alleviating the pain of hopeless cancer and bringing about a regression of the cancerous growth has now been tried on patients between the ages of 17 months and 66 years, Dr. Fay said. Periods of treatment have ranged from 24 hours to eight days.

"The commercial world of science has come to our assistance recently and devised refrigerating units with blankets containing coils of tubing capable of regulation, and thermostatically controlled, offering a wide variation in temperature between 20 degrees F. and 140 degrees F.," Dr. Fay explained.

"These units have supplemented for the most part the cracked ice methods of temperature reductions in use only a few weeks ago and so far have seemed to offer prompt and favorable means by which patients' temperatures can be rapidly reduced from normal to the desired level."

Very recently, Dr. Fay said, it has been found that less and less sedatives are required as the refrigeration controls pain and suffering to a most remarkable degree and in every instance relief from pain has been obtained.

Dr. Fay emphasized that it has now been shown that patients can be maintained at body temperature levels below the point where carcinoma cells (cancer) can multiply and grow and that relief from pain by chilling can be applied in other conditions than cancer.

"Gross evidence of regression of tumors and improvement in the patient's general condition continues to reassure us that the application of refrigeration measures will eventually bring some form of reasonable and beneficial therapy," he concluded.

Dr. Lawrence W. Smith, associate of Dr. Fay in the "frozen sleep" method, described microscopic studies on the inhibition of the growth of young, embryonic and fast growing cells as the temperature is reduced. From studies on chicken embryos and their cessation of growth at 95 degrees Fahrenheit the present chilling of the whole body of cancer patients originated.

Dr. Smith predicted months and years of careful work would be needed "to understand the mechanism of these degenerative changes in the tumor cells, and to evaluate the usefulness of the method from a therapeutic standpoint."

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***ORSATOMAT***

***Translated, a crystal-clear automatic gas analyzer permitting the researcher to watch the process going on within. Made of Lucite, it won an honorable mention in the scientific section of the Fourth Annual Modern Plastics Competition.***

CHEMISTRY

# Plastics Competition Covers Coat Hangers to Lenses

EVERYTHING from a new kind of coat hanger to the table tops for the Library of Congress have won awards in 1939's Modern Plastics Competition.

The widespread use of laminated plastics in the new Annex of the Library of Congress received a major award. Table tops, corrider wall panels, book shelves, drawer fronts in the card index room, were only a few uses of plastic products in this new architectural creation.

Luggage, whose surface is a laminated wood veneer imbedded in transparent plastic and which looks as though the modern traveller was carrying around part of a beautiful inlaid table top, won another award.

Plastics that have made possible continuous spinning and processing of viscose rayon yarn were recognized.

Other prize winners include:

A plastic garment hanger that keeps clothes from slipping off the sides and contains clips for sleeveless dresses.

A shoe stitching machine, fabricated of plastic, which markedly reduces noise.

A streamlined pressure reducing valve whose transparent plastic outer parts disclose the condition of intricate interior mechanisms for easy inspection.

Dentures made of plastics.

A small field glass having a square view—rather than a circular one—which is especially designed for sporting events.

Invisible contact lenses for the eyes, which require no frames.

A transparent, plastic clarinet.

A speedometer gauge for motor cars which magnifies two times and makes it easy to read the small markings.

An all-plastic shoe heel that won't split, peel, mar or crack.

Molded plastic jewelry.

Tennis and squash racquets.

The competition is sponsored by the trade magazine, *Modern Plastics*.

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