



**CRACKING WIDE OPEN**—Photomicrograph of polypropylene film shows break along the edge of spherulites (radial crystal growths in polymers) that occurred during rapid crystallization. This phenomenon was discovered by Fabric Research Laboratories, Inc., Dedham, Mass.

## PSYCHIATRY

## No Spirit of Belonging

► DESPITE the well known fact that juvenile delinquents like to run in gangs, one principal difficulty of the psychiatrist trying to help these boys by group therapy is that it is very hard to build up a spirit of belonging to the group.

The reason for this, Dr. Albert W. Silver, psychologist of the Wayne County Juvenile Court Clinic, Detroit, Mich., told the American Orthopsychiatric Association meeting in New York, seems to be that delinquents generalize their distrust of adults and hostility toward them to include those of their own age group.

Just as black leather jackets, long hair and jive talk are "trademark" carried by these young delinquents, the boys are enough alike in other ways so that a psychiatrist can generalize a little about them.

The young delinquent lives in the here and now. The delinquents would prefer to have the judge send them for a short sentence in an inferior, punitive institution rather than for a longer sentence in an institution that is superior in every other respect. The delinquent will steal, play hookey, or beat someone for immediate gain or to prevent a beating by other members of his gang. He does not give any thought to the long-range consequences.

The delinquent is enormously preoccupied with violence—his own violence, as when he beats alcoholics, or violence by teachers, policemen, institutional supervisors of whom he has been the victim. This preoccupation is close to the surface of his mind.

Far below the surface are feelings of terror, helplessness and anger experienced

by those who have been tied and beaten by their own parents. Feelings are generally avoided and distrusted by delinquents. They seem to regard feeling as something soft and feminine.

In the main, they avoid any discussion of their parents.

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## TECHNOLOGY

## Future Library Described

► BY 2000 A.D. the United States will have to have an automatized national library, Prof. John G. Kemeny of Dartmouth College, Hanover, N.H., has predicted.

Each page of each "book" in this library, he suggested, will be stored on possibly a square millimeter of tape. The patrons will never go to the library, see the master tapes or find that a book is "out." Copies will be made for them to read, conveniently enlarged, on the screens of viewing devices in their own offices or homes.

Obtaining a copy of a book will be like making a long-distance call—a person will merely dial the appropriate code number and the book will be squirted into the viewing machine electronically. The reader will be able to keep the book on his tape as long as he wishes, then erase the tape and have another book flashed to him.

Prof. Kemeny's lecture was one of a series on "Management and the Computer of the Future" presented by the Massachusetts Institute of Technology School

## PSYCHIATRY

## Special Classes Improve Disturbed Children

► EVERY emotionally disturbed child placed in special classes in Gary, Ind., showed improvement, a psychiatrist has reported.

All the pupils had at least average intelligence and were believed able to benefit from the special class teaching.

The first of three special classes for emotionally disturbed children in the Gary, Ind., Public Schools in collaboration with the Lake County Mental Health Clinic started in 1958. The schools wanted to separate disrupting or non-learning children from others and later return them to regular classes.

Dr. Jay L. Bisgyer, a Gary, Ind., psychiatrist, reported results of the program to the American Orthopsychiatric Association meeting in New York. Three of the children in special classes have been returned to regular classes and are reported doing well.

Younger children seem to respond faster and change more in the special classes than older children do, Dr. Bisgyer said. He said that if children with emotional problems are sent to a special class early, a year or two can change them enough so they can return to regular classes and progress normally with their classmates.

The teacher is the most important individual in the special class program. Although not a therapist, she exerts a powerful healing effect. A psychiatric evaluation of a teacher selected for such special classes must be thorough. If a suitable teacher cannot be found, "it is better to postpone establishing a class." Dr. Bisgyer said.

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of Industrial Management, Cambridge, Mass., to celebrate the Institute's centennial.

Such a library will be needed, he said, because if the present rate of growth continues, even our richest universities will not be able to afford building, cataloguing and keeping up the kind of libraries they have now. Even though a national library might cost a billion dollars, he contended, it could prove more economical than continuance of the present system of storing information.

Moreover, Prof. Kemeny said, "there is no conceivable way in a library of tens of millions of volumes that human effort could locate an item in a matter of minutes."

He envisions a library of 10,000,000 volumes in 2000 A.D. that will grow to possibly 300,000,000 volumes by 2100 A.D.

"Storage methods must miniaturize books and put them on a medium easily handled by machines," he said, because of this rate of growth.

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