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EYEING LASER LENSES—This Martin Company optical engineer who is peering at an array of precision lenses prepared for laser research, can grind lens surfaces so smooth that molecules on the surface of one lens join with molecules on the other upon contact, providing the strongest possible bond between them.

PSYCHOLOGY

Sorcerers Still Practice

A Honolulu physician cites actual cases of sorcery among the Kahunas of Hawaii in which the skin is affected, causing illness and death.

➤ **SORCERY** is still practiced in rural Hawaii, a Honolulu physician reported in the Archives of Dermatology 90:530, 1964.

Dr. Harold M. Johnson noted actual cases in which people have been made ill or have actually died as a result of the ancient Kahuna sorcery. The skin of patients is particularly affected.

A two-year-old part-Hawaiian girl, for example, had been given to a half-brother whose family was childless. After several months of neglect and beatings, the child was taken back by her own parents. A few weeks later the family was notified that their daughter was being Kahunaed in order to bring vengeance against the parents. The parents lost all hope of her survival but brought her to Queen's Hospital.

The child's skin had become crusted with ulcerated lesions and she was critically ill. After her death an autopsy revealed no abnormal findings.

Another case reported by Dr. Johnson was that of a "Kahunaed" man who could break his spell by taking methylene blue tablets every half hour for three doses. The patient would realize that the spell was broken if the color of his urine turned deep blue. At two o'clock in the morning the patient telephoned the doctor that this had happened. His recovery was uneventful.

An editorial in the Journal of the American Medical Association, 190:773, 1964, commenting on this article, pointed out that

primitive people, when subjected to sorcery or black magic, may become seriously ill and die.

"Voodoo has been reported among Negroes in Africa and Haiti and among the aborigines of Australia," the editorial stated. "In 1964 educated and civilized persons find it difficult to believe that areas still exist where sorcery is practiced."

The Kahunas of Hawaii were grouped from ancient times into good and bad priests. Sorcery was practiced by the group known as Kahuna Anaana. There are men and women of Hawaiian ancestry today who will willingly accept death, not seeking medical aid, if they believe that a Kahuna is praying them to death.

• Science News Letter, 86:359 December 5, 1964

TECHNOLOGY

Machine Can Simulate Master Optician's Hand

➤ A **MACHINE** that can polish lenses as smoothly and finely as a master optician has been developed by Diffraction Limited, Inc., Bedford, Mass.

The new cylinder machines, which are making lenses for such applications as optical analog computers, can mass produce the lenses with surface accuracies to within a quarter of a wavelength.

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PSYCHIATRY

Link Mental Disease To Protein Factor

➤ **SCIENCE** has a new possibility for a promising approach to schizophrenia, the most common mental illness.

This disease has been linked to a protein factor in blood plasma by a team of Detroit researchers and thousands may eventually be rescued from a living death if research makes progress.

A typical form of schizophrenia is a stuporous immobility, lasting for weeks, months or even years without interruption. It is believed that this may be due to a protein factor that keeps the energy supply of the schizophrenic's body from being controlled properly.

The possibility of neutralizing or inhibiting this protein factor was presented to the meeting of the National Association for Mental Health in San Francisco by Dr. Peter G. S. Beckett of the Lafayette Clinic, Detroit.

In animal studies Dr. Beckett and his colleagues, Drs. Charles Frohman and Jacques Gottlieb, found that excitement, exercise and cold can inhibit the protein factor, and they suspect that a substance within animal cells, liberated by hormones, has this neutralizing effect.

"It is much too early to say what comes next," Dr. Beckett said. "It is clear that in principle, such a substance might possibly be used to neutralize this protein factor in treatment of schizophrenic patients in the future."

Another study by this same team, showed that sheltered monkeys also had a high concentration of the protein factor.

This suggests, said Dr. Beckett, that a biological abnormality in schizophrenia is not necessarily hereditary but may be related to early experience in childhood.

The child whose mother overprotects and babies him, and does not allow him to experience the ordinary knocks and squabbles of childhood, he said, may later show the presence of the protein factor.

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MEDICINE

New Heart Operation Can Help Save Babies

➤ A **NEW OPERATION** to save babies born with a hole between the two lower chambers of the heart has been developed by Dr. J. Francis Dammann Jr., University of Virginia Medical School, Charlottesville. When the hole is too large, more blood than normal flows through the pulmonary artery and into the lungs causing blood vessels in the lungs to harden.

A simple way to correct this is to place a band around the pulmonary artery to cut down the blood flow and protect the lungs, he said. How much to reduce the blood flow can be determined by measuring the blood pressure in the lungs.

This operation should keep a child in normal health until he is of school age. Then he will be a good candidate for corrective heart surgery.

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