In 1943, Hofmann, in Basel, first established the remarkable psychic effects of the ergot derivative Lysergic acid-diethylamide (LSD). Using the substance in normal and psychotic individuals, Stoll found that LSD produces an intoxicated state of the acute exogenous reaction type. Besides motor and vegetative symptoms there were disturbances in perception, particularly visual hallucinations, accompanied by a mild disturbance of consciousness but partly maintained introspection. The thought process showed marked distractibility and acceleration, the mood varied from euphoric to depressed, and memory disturbances (temporary) appeared as an after effect of the intoxication. A most significant property of LSD is its effectiveness in infinitely small doses of 20–30 gamma (0.00002–0.00003 g).

The author reports further observations in 30 psychiatric cases (refractory to all treatment) and 7 normal individuals. The effects of LSD, similar to those observed by Stoll, can be summarized as follows: motor disturbances (ataxia, positive Romberg, broad gait, indistinct speech, change in handwriting); gross neurological disturbances were lacking but some cases showed an increase in tendon reflexes; vegetative symptoms; disturbances of visual and auditory perception (intense color experience, misinterpretation of noises). A special disturbance of basic consciousness was not observed outside of the feeling of intoxication. Capacity for self-criticism was never lost. The stream of thought was lightened, accelerated and easily distracted, although there was a tendency to return repeatedly to a certain theme. The mood changes involved intensification of the previous basic mood. There was a definite decrease in power of concentration, though not pathological.

The mental patients included 10 paranoid schizophrenics, 6 catatonics, 5 hebephrenics, 2 simple schizophrenics, 2 propfschizophrenics, 1 schizoid psychopath, 1 paranoid–manic–depressive mixed psychosis, 2 endogenous depressions, 1 progressive paralysis. These patients showed a much greater resistance to the effects of LSD and a better tolerance to it than did the normal controls. In 19 of the 30 cases the dosage used was 100 gamma and more, and in one case 280. Vegetative symptoms were most prominent in these patients (feeling of weakness, fatigue, nausea, dizziness, headache, paresthesias, hyper-salivation, perspiration, circulatory disturbances, etc.); neurologically, motor and ataxic disturbances were occasionally observed (in 1 case, athetotic movements, often compulsive laughter, which points to diencephalic involvement). The disturbances of perception, consciousness and personality were less marked in the psychotic than in the normal subjects and the LSD intoxication was milder with reference to onset and duration of effect. The therapeutic possibilities of the drug could not be determined definitely and conclusions could not be drawn.
on its value for differential diagnosis. In view of the resistance of mental patients to LSD, the question arises whether a substance similar to LSD is etiologically involved in psychoses."

**COMMENT:** LSD, though one of our investigational substances, offers nothing of direct promotional value. It is possible that the drug may eventually find use for experimental induction of psychotic states. For previous papers by Kauders and Nickerson see C.A.& E. No. 77, p. 1 and No. 30, p. 13.