between the findings at Cardiff and Birmingham must lie in a difference in what is regarded as sinusitis. At Cardiff it is felt to be unjustified to diagnose sinusitis merely on the ability to culture a few organisms from sinus washings; it is probable that healthy controls would show very similar results. Further, it must not be assumed that such infections are necessarily a contributory factor in any psychosis which is present. The investigation must be carried out in a highly critical manner.

M. HAMBLIN SMITH.

Cerebral Localization of Epileptic Manifestations. (*Arch. of Neur. and Psychiat., vol. xxx, p.* 709, *Oct.*, 1933.) *Penfield, W., and Gage, L.*

The authors studied 75 cases of focal epilepsy, in nearly all of which cerebral pneumography was carried out and the patient operated on under local anæsthesia. The seizures which were studied were either spontaneous or induced by hyperpnœa, by hydration or by direct cortical stimulation. The most frequent lateralizing sign found was a deviation of the head and eyes to the side opposite the hemisphere involved. Seizures which have their origin in the frontal lobe are usually characterized by loss of consciousness without aura and turning of the eyes, head and body to the opposite side, followed by nearly simultaneous convulsions of the opposite extremities, falling, and generalization of the attack. In seizures which arise in the precentral or post-central gyrus consciousness is usually lost late. Consciousness is likewise apt to be lost late in seizures arising anywhere behind the central sulcus, and such seizures are ushered in by auras. The aura may be forgotten through a retrograde amnesia. Seizures originating in the supramarginal gyrus in area 7*a*, possibly extending to areas 19 and 22, are characterized by a discontinuous twinkling of lights seen in the contralateral field, without any involvement of the calcarine zone.

An aura of pain or of epigastric distress may arise from activity of the cerebral cortex, or cortical stimulation reproduces such phenomena.

The buzzing sounds and the dizziness which are characteristic of unilateral temporal lobe seizures have been reproduced by electrical stimulation, but the more complicated dream states and odours have never been reproduced. Involvement of a large artery, such as occurs when a glioma surrounds the origin of the artery, may give rise to an epileptiform seizure beginning at a distance from the primary lesion, but within the distribution of the artery.

G. W. T. H. FLEMING.

The Rapid Silver Impregnation of the Neuroglia in the Human Central Nervous System Fixed in Formalin. (*Boll. Soc. Ital. Biol. Sper., vol. viii, p.* 218, 1933.) *Jedlowski, P.*

The method is—

1. Fix in 10–15% formalin for a minimum of 15–20 days.
2. Freeze and section the pieces (15–20 micra).
3. Wash in distilled water at room temperature or at 37–40°.
4. Immerse for 5 minutes in 50% pyridine solution at 25–30°.
5. Without washing, by means of glass spatula, transfer sections successively into three dishes each containing about 20 c.c. of 2% silver nitrate, allowing the sections to remain 1–3 minutes in each dish or until they assume the colour of pale tobacco. Make the transfer in the light and at a temperature of 48–50°.
6. Without washing, pass for 5 minutes through the reducing agent at 50°, consisting of hydroquinone 15 cgrm., formalin 15 c.c., distilled water 70 c.c.
7. Repeat the washing in distilled water for 5–10 minutes.
8. Pass through a ·1% solution of gold chloride (microscopic control).
9. Wash in distilled water and then fix for 3–5 minutes in a 2% sodium sulphite solution at 50°.
10. Repeat the washings in 95% alcohol and xylene, and mount in balsam.

P. MASUCCI (Chem. Abstr.).